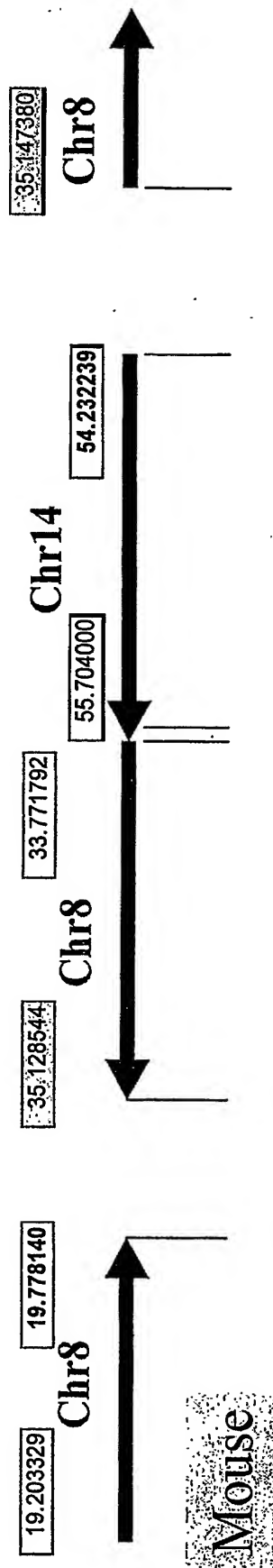
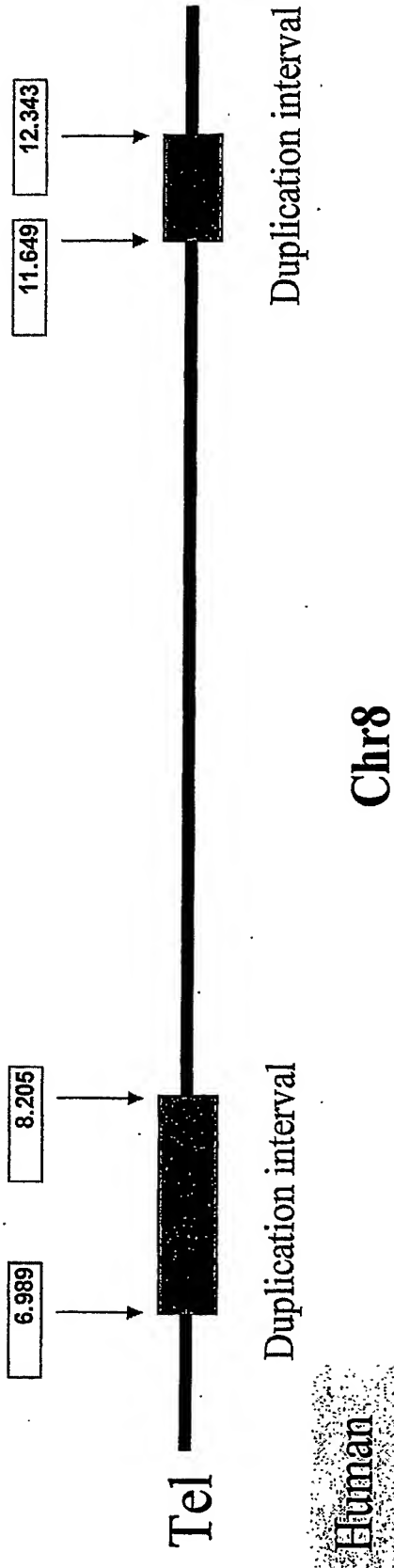


FIG. 1A

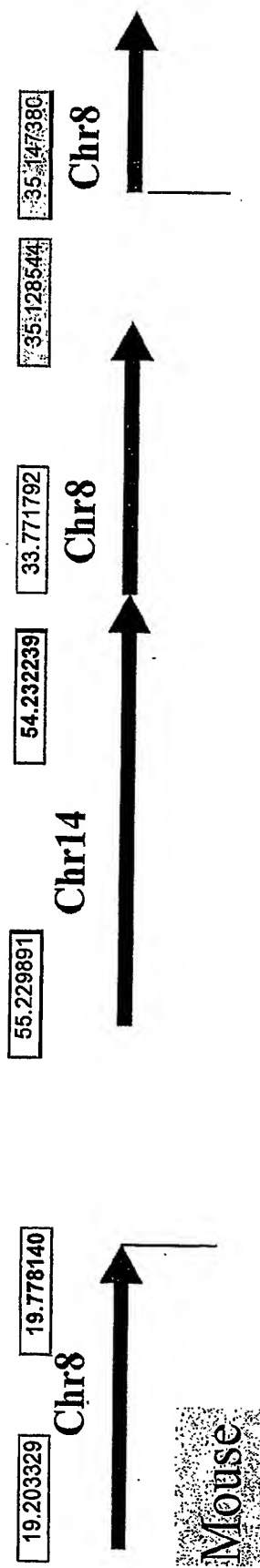


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FIG. 1B



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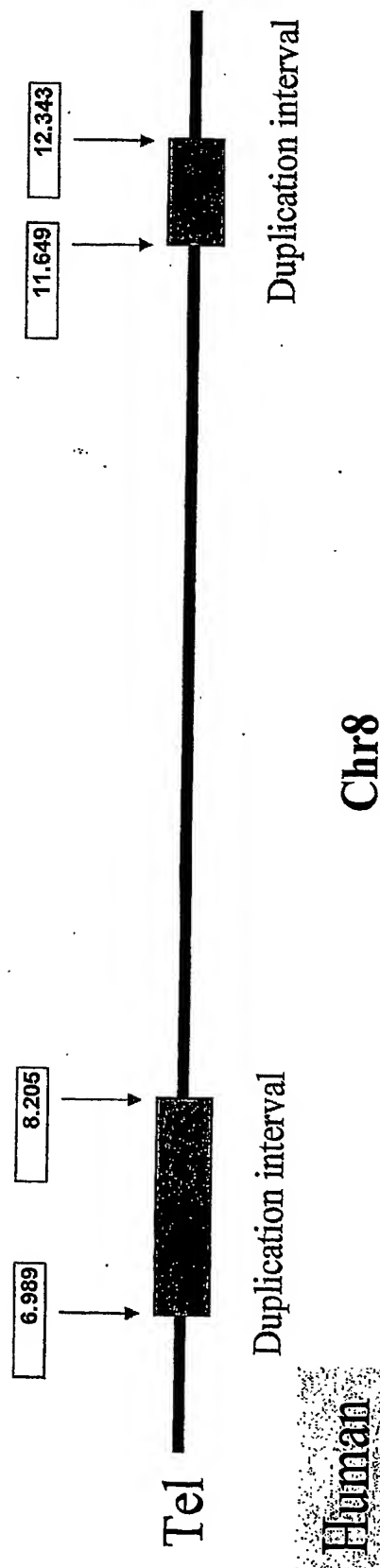
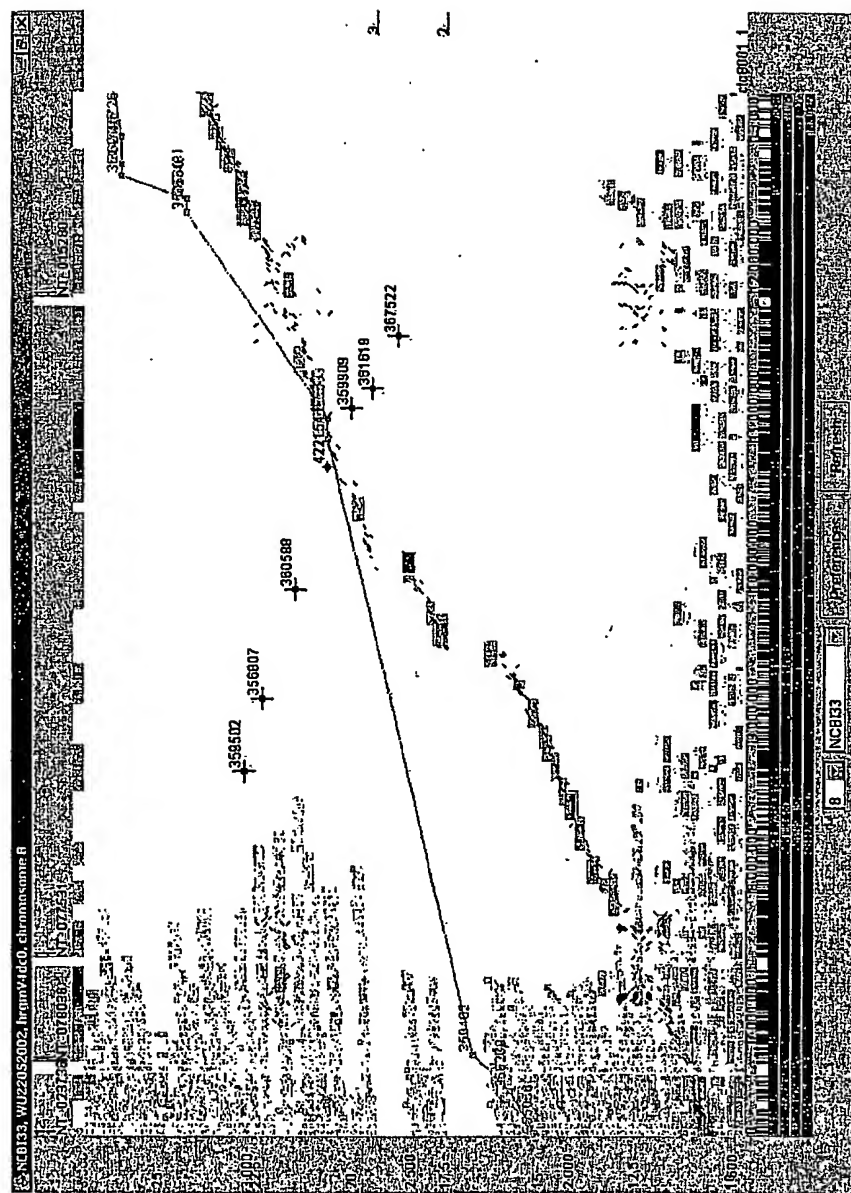


FIG. 1C



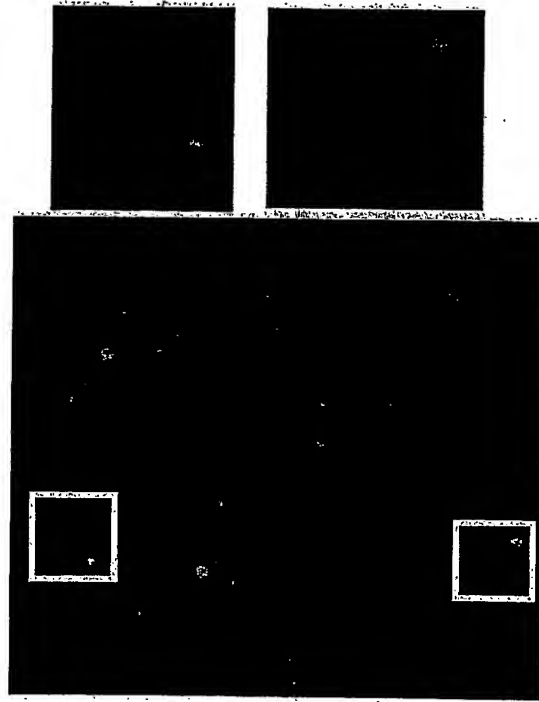
## Duplication interval

**Chr8**

### Duplication interval

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FIG. 2A





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FIG. 2B

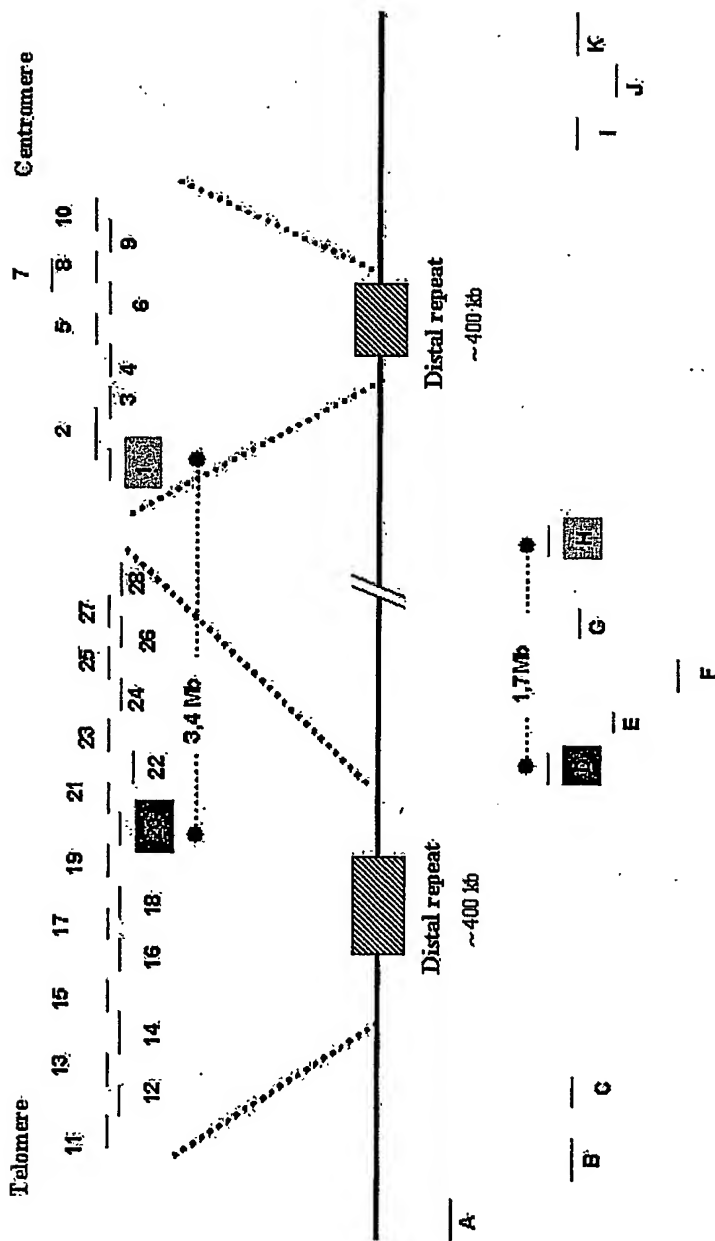


FIG. 3. Results of FISH Measurements

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## Panic Disorder Patients

Total number	Hz C	Het	Hz Rare	Frequency of Inverted form
47	14	22	11	47%

## Controls

Total number	Hz C	Het	Hz Rare	Frequency of Inverted form
173	64	93	16	36%

FIG. 4. Association results: Orientation at 8p23<sup>7/90</sup>

Marker	Marker Type	Number Genotypes	R-squared	p-value
SG08S5	SNP	123	0.644	3.21E-25
SG08S95	SNP	101	0.641	5.16E-20
DG8S269	M/I	114	0.617	4.80E-24
DG8S163	M/I	126	0.590	2.03E-23
DG8S197	M/I	120	0.563	2.34E-20
AF131215-2	M/I	116	0.544	4.99E-21
DG8S127	M/I	67	0.489	5.89E-14
SG08S120	SNP	124	0.472	1.75E-17
DG8S179	M/I	91	0.471	1.85E-13
SG08S27	SNP	124	0.457	2.37E-15
DG8S261	M/I	88	0.456	6.63E-12
SG08S71	SNP	119	0.456	9.88E-17
SG08S32	SNP	125	0.448	2.61E-15
SG08S517	SNP	118	0.443	2.34E-15
SG08S70	SNP	120	0.442	5.74E-16
SG08S102	SNP	119	0.440	1.16E-15
SG08S73	SNP	117	0.437	9.84E-15
SG08S76	SNP	120	0.436	6.37E-17
SG08S26	SNP	124	0.433	2.31E-14
DG8S242	M/I	83	0.404	2.34E-10
SG08S15	SNP	126	0.395	1.39E-14
DG8S257	M/I	122	0.370	2.27E-15
SG08S138	SNP	122	0.362	6.68E-12
DG8S161	M/I	121	0.349	6.81E-13
SG08S520	SNP	123	0.337	1.87E-11
DG00AAHBG	SNP	23	0.336	0.0046
SG08S508	SNP	121	0.333	8.52E-12
DG8S156	M/I	115	0.331	2.82E-11
D8S1695	M/I	123	0.309	8.65E-19
DG8S170	M/I	114	0.303	9.06E-11

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FIG. 5A. Results for Panic Disorder

Marker	Allele	T	P-val	#aff	aff.freq	#con	con.freq	Top LD marker	Inversion risk allele	Concordance	Comments
SG08S71	0	1.49537	4.32E-05	295	0.605085	740	0.506081	YES	0	YES	
DG8S197	1	1.47085	0.00124	283	0.461131	730	0.367808	YES	1	YES	
SG08S73	1	1.50855	0.00207	292	0.587329	378	0.48545	YES	1	YES	
DG8S332	0	1.49355	0.00022	279	0.340502	726	0.256887	Multiple	Multiple	YES	
AF131215-4	14	1.4211	0.00029	292	0.523973	795	0.436478	Multiple	Multiple	YES	
SG08S5	2	1.42574	0.00032	291	0.482818	743	0.395693	YES	2	YES	
SG08S520	1	1.49072	0.000365	292	0.65411	397	0.559194	YES	1	YES	
SG08S95	2	1.41718	0.000601	294	0.496599	586	0.41041	YES	2	YES	
SG08S508	3	1.44504	0.001044	290	0.646552	392	0.558673	YES	3	YES	
SG08S102	2	1.40516	0.002054	295	0.601695	387	0.518088	YES	2	YES	
DG00AAHB(	2	1.57795	0.002763	112	0.508929	391	0.396419	YES	2	YES	
SG08S70	3	1.38687	0.003309	285	0.577193	380	0.496053	YES	3	YES	
DG8S161	2	1.343	0.003748	284	0.646127	735	0.57619	YES	2	YES	
DG8S298	0	1.51561	0.003916	256	0.871094	726	0.816804	YES	0	YES	
SG08S506	2	1.3675	0.004498	292	0.530822	381	0.452756	YES	2	YES	
SG08S15	2	1.30884	0.006102	295	0.501695	713	0.434783	YES	2	YES	
DG8S249	-4	2.09302	0.006519	184	0.065217	682	0.032258	Multiple	Multiple	YES	
DG8S148	0	1.31082	0.007095	290	0.441379	694	0.376081	Multiple	Multiple	YES	
DG8S269	-5	1.95983	0.007424	284	0.052817	741	0.027665	YES	Multiple	YES	
DG8S127	1	1.31953	0.007642	269	0.501859	604	0.432947	1	1	YES	
SG08S93	2	1.37711	0.007751	297	0.234007	705	0.18156	2	2	YES	
D8S1695	6	1.5987	0.00817	277	0.099278	845	0.064497	YES	Multiple	YES	

FIG. 5B. Results for Panic Disorder

Marker	Allele	T	p-val	#aff	aff.freq	#con	con.freq	Top LD marker	Inversion risk allele	Concordance	Comments
SG08S517	3	1.33373	0.00892	295	0.6	392	0.529337	YES	3	YES	
AF131215-2	4	1.28932	0.010287	283	0.462898	780	0.400641	YES	Multiple	YES	
AF131215-1	0	1.39401	0.010326	272	0.202206	780	0.153846		Multiple	NO	allele not specific for inversion
DG8S242	0	1.40604	0.010364	157	0.436306	476	0.355042	YES	0	YES	
DG8S136	-4	0.540184	0.012974	284	0.03169	779	0.057125		Multiple		
D8S16	2	0.789193	0.013012	299	0.528428	876	0.586758		Multiple		
DG8S148	-2	0.743933	0.014561	290	0.191379	694	0.241354		Multiple		
SG08S39	0	1.28699	0.014737	294	0.564626	523	0.501912		0	YES	
D8S1130	12	1.73607	0.015013	295	0.057627	867	0.034025		Multiple	NO	allele not specific for inversion
DG8S127	0	0.77441	0.015453	269	0.381041	604	0.442881	YES	1		
DG8S232	2	1.28256	0.015593	266	0.441729	726	0.381543		Multiple	YES	
DG8S137	16	27512.1	0.016338	73	0.013697	234	5.05E-07		Multiple	Rare allele	
DG8S269	0	0.790452	0.017797	284	0.522887	741	0.580972		Multiple		
D8S550	2	8.22E-13	0.020519	282	4.57E-15	814	0.005528		Multiple		
SG08S507	3	1.30567	0.021168	294	0.695578	396	0.636364		3	YES	
SG08S507	2	0.765893	0.021168	294	0.304422	396	0.363636		3		
DG8S245	4	0.472897	0.021506	273	0.020147	468	0.041667		Multiple		
DG8S197	2	25908.7	0.023849	283	0.003533	730	1.37E-07		1	Rare allele	
D8S1825	0	1.31206	0.024789	170	0.526471	702	0.458689		Multiple	YES	
SG08S27	2	1.27723	0.024806	294	0.506803	397	0.445844	YES	2	YES	
SG08S27	1	0.782947	0.024806	294	0.493197	397	0.554156		2		
DG8S257	0	0.794875	0.025242	280	0.576786	680	0.631618	YES	Multiple		

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FIG. 5C. Results for Panic Disorder

Marker	Allele	T	p-val	#aff	aff.freq	#con	con.freq	Top LD marker	Inversion risk allele	Concordance	Comments
D8S503	2	0.443736	0.026073	220	0.015909	825	0.035152	Multiple			
DG8S297	8	2.06626	0.026116	280	0.032143	727	0.015819	Multiple	Rare allele		
DG8S297	6	0.35351	0.02801	280	0.007143	727	0.019945	Multiple			
SG08S120	2	1.24	0.028331	297	0.5	700	0.446429	YES	2	YES	
SG08S120	0	0.806452	0.028331	297	0.5	700	0.553571		2		
D8S351	12	8.33E-12	0.028377	142	7.72E-14	762	0.009186	Multiple			
DG8S159	-6	18155.3	0.028441	240	0.004166	556	2.30E-07	0	Rare allele		
D8S1695	-4	6.13816	0.030127	277	0.00722	845	0.001183	Multiple	Rare allele		
D8S1759	16	0.180252	0.031831	298	0.001678	866	0.009238	Multiple			
SG08S26	0	1.23132	0.033807	297	0.503367	701	0.451498	YES	0	YES	
SG08S26	2	0.812135	0.033807	297	0.496633	701	0.548502	0			
D8S1130	8	0.686966	0.034226	295	0.067797	867	0.095732	Multiple	YES	YES	
DG8S221	-2	0.69336	0.035493	246	0.123984	292	0.169521	Multiple			
D8S1130	-12	1.56804	0.037716	295	0.061017	867	0.039792	Multiple	YES	YES	
D8S1759	14	0.33195	0.037947	298	0.005034	866	0.015012	Multiple			
DG8S307	8	0.195216	0.038339	60	0.008333	315	0.04127	0			
DG8S153	-2	1.30825	0.038856	159	0.493711	473	0.427061	Multiple	YES	YES	
DG8S277	4	0.32936	0.039967	276	0.005435	674	0.016321	Multiple			
DG8S192	-2	1.47675	0.04181	164	0.140244	568	0.099472	Multiple	YES	YES	
D8S1695	16	1.36E-16	0.046136	277	5.65E-19	845	0.004142	Multiple			
DG8S265	33	5.17242	0.04906	292	0.006849	751	0.001332	Multiple	Rare allele		
DG8S257	-2	1.22755	0.053394	280	0.358929	680	0.313235	Multiple	YES	YES	

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FIG. 5D. Results for Panic Disorder

Marker	Allele	r	p-val	#aff	aff.freq	#con	con.freq	Top LD marker	Inversion risk allele	Concordance	Comments
DG8S127	2	1.75E-12	0.054739	269	7.27E-15	604	0.004139	1			
DG8S163	0	1.20367	0.05598	288	0.515625	815	0.469325	0	YES		
DG8S163	3	0.830793	0.05598	288	0.484375	815	0.530675	0			
DG8S156	0	0.838003	0.079775	266	0.524436	777	0.568211	Multiple			
DG8S261	-2	28913.2	0.081789	155	0.003225	549	1.12E-07	0	Rare allele		
DG8S179	7	1.19342	0.085977	271	0.51845	622	0.474276	7	YES		
SG08S138	2	1.1735	0.143127	293	0.288396	746	0.256702	2	YES		
SG08S32	0	1.17317	0.150121	295	0.418644	397	0.380353	0	YES		
SG08S76	2	1.15223	0.195671	293	0.55802	394	0.522843	0	YES		
DG8S170	-8	1.68E-11	0.265216	276	2.22E-14	759	0.001318	2	YES		
								Multiple			

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FIG. 6A. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.636132	0.927223	96	0.640625	811	0.65783	0.656009	0.223837	1	4	AC022239-5
0.227291	1.23196	96	0.28125	811	0.24106	0.245314	1.45774	1	0	AC022239-5
0.316779	0.740298	96	0.0625	811	0.0826141	0.0804851	1.0022	1	8	AC022239-5
0.412413	2.12E-12	96	3.93E-15	811	0.00184957	0.0016538	0.671834	1	-12	AC022239-5
0.814911	0.843158	96	0.0104167	811	0.0123305	0.0121279	0.0548008	1	-4	AC022239-5
0.863298	1.20792	96	0.00520832	811	0.00431566	0.00441014	0.0296449	1	-8	AC022239-5
0.160568	1.41548	86	0.139535	574	0.102787	0.107576	1.96887	1	12	AC068974-2
0.421391	1.15389	86	0.313954	574	0.283972	0.287879	0.646434	1	14	AC068974-2
0.367219	0.718343	86	0.0465116	574	0.0635888	0.0613636	0.813054	1	10	AC068974-2
0.23462	0.82084	86	0.395349	574	0.44338	0.437121	1.41263	1	0	AC068974-2
0.860978	1.07122	86	0.0465116	574	0.043554	0.0439394	0.0306702	1	16	AC068974-2
0.134389	2.25E-14	86	1.58E-16	574	0.00696864	0.00606061	2.24106	1	20	AC068974-2
0.440332	0.677047	86	0.0232559	574	0.0339721	0.0325758	0.595417	1	6	AC068974-2
0.477172	0.51057	86	0.00581394	574	0.011324	0.0106061	0.505319	1	8	AC068974-2
0.116188	3.37871	86	0.0174419	574	0.00522648	0.00681818	2.46797	1	18	AC068974-2
0.0433771	64445.2	86	0.00581335	574	9.07E-08	0.000757576	4.08064	1	-4	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	2	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	15	AC068974-2
0.518787	2.23196	86	0.00581394	574	0.00261324	0.0030303	0.416305	1	-2	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	13	AC068974-2
0.160568	1.41548	86	0.139535	574	0.102787	0.107576	1.96887	1	12	AC068974-2
0.421391	1.15389	86	0.313954	574	0.283972	0.287879	0.646434	1	14	AC068974-2
0.367219	0.718343	86	0.0465116	574	0.0635888	0.0613636	0.813054	1	10	AC068974-2
0.23462	0.82084	86	0.395349	574	0.44338	0.437121	1.41263	1	0	AC068974-2
0.860978	1.07122	86	0.0465116	574	0.043554	0.0439394	0.0306702	1	16	AC068974-2
0.134389	2.25E-14	86	1.58E-16	574	0.00696864	0.00606061	2.24106	1	20	AC068974-2
0.440332	0.677047	86	0.0232559	574	0.0339721	0.0325758	0.595417	1	6	AC068974-2
0.477172	0.51057	86	0.00581394	574	0.011324	0.0106061	0.505319	1	8	AC068974-2
0.116188	3.37871	86	0.0174419	574	0.00522648	0.00681818	2.46797	1	18	AC068974-2
0.0433771	64445.2	86	0.00581335	574	9.07E-08	0.000757576	4.08064	1	-4	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	2	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	15	AC068974-2
0.518787	2.23196	86	0.00581394	574	0.00261324	0.0030303	0.416305	1	-2	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.00087108	0.000757576	0.279334	1	13	AC068974-2
0.754266	0.933961	93	0.145161	780	0.153846	0.152921	0.0979812	1	0	AF131215-1
0.224689	0.81593	93	0.295699	780	0.339744	0.335052	1.47417	1	2	AF131215-1
0.846815	1.0328	93	0.317204	780	0.310256	0.310997	0.0373201	1	-2	AF131215-1
0.462742	0.692307	93	0.0215054	780	0.0307692	0.0297824	0.539254	1	22	AF131215-1
0.271308	1.49821	93	0.0537635	780	0.0365385	0.0383734	1.21012	1	10	AF131215-1
0.100567	2.13967	93	0.0376345	780	0.0179487	0.0200458	2.69654	1	-4	AF131215-1
0.673039	1.16949	93	0.0483871	780	0.0416667	0.0423826	0.178068	1	8	AF131215-1
0.794508	1.09076	93	0.0591398	780	0.0544872	0.0549828	0.06784	1	4	AF131215-1
0.716617	1.26229	93	0.016129	780	0.0128205	0.013173	0.131758	1	-8	AF131215-1
0.501936	1.77E-12	93	2.28E-15	780	0.00128205	0.00114548	0.45084	1	12	AF131215-1
0.634992	6.50E-10	93	4.17E-13	780	0.000641026	0.000572738	0.225352	1	6	AF131215-1
0.0342293	62457	93	0.00537562	780	8.65E-08	0.000572738	4.48322	1	14	AF131215-1
0.187336	0.81879	98	0.484694	780	0.534615	0.529043	1.73844	1	0	AF131215-2
0.152999	1.24434	98	0.454082	780	0.400641	0.406606	2.04209	1	4	AF131215-2
0.699807	0.878137	98	0.0510205	780	0.0576923	0.0569476	0.148673	1	8	AF131215-2
0.399191	1.69E-12	98	3.26E-15	780	0.00192308	0.00170843	0.710761	1	-8	AF131215-2
0.416268	2.00001	98	0.0102041	780	0.0051282	0.00569476	0.660829	1	-4	AF131215-2
0.244447	0.834808	97	0.386598	795	0.430189	0.425448	1.35476	1	0	AF131215-4
0.0185408	1.4314	97	0.525773	795	0.436478	0.446188	5.54432	1	14	AF131215-4
0.482884	0.81344	97	0.0670104	795	0.0811321	0.0795964	0.492344	1	12	AF131215-4
0.0175263	0.170104	97	0.00515467	795	0.0295597	0.0269058	5.64289	1	8	AF131215-4
0.988347	1.02487	97	0.0154639	795	0.0150943	0.0151345	0.00157459	1	16	AF131215-4
0.239428	5.16E-12	97	1.98E-14	795	0.00377358	0.00336323	1.38386	1	18	AF131215-4
0.282932	8.68E-13	97	2.74E-15	795	0.00314465	0.00280269	1.15285	1	10	AF131215-4



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FIG. 6B. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.631289	5.34E-10	97	3.36E-13	795	0.000628931	0.000560538	0.230316	1	4	AF131215-4
0.282669	1.36545	96	0.0833332	801	0.062422	0.06466	1.15421	1	-6	AF188029-1
0.268777	0.834559	96	0.307292	801	0.347066	0.342809	1.22298	1	0	AF188029-1
0.239275	0.525159	96	0.015625	801	0.0293383	0.0278707	1.38486	1	-12	AF188029-1
0.594626	1.10444	96	0.21875	801	0.202247	0.204013	0.283178	1	-4	AF188029-1
0.549289	0.886101	96	0.166667	801	0.184145	0.182274	0.358593	1	-8	AF188029-1
0.821729	0.907332	96	0.03125	801	0.0343321	0.0340022	0.0507699	1	2	AF188029-1
0.171693	1.53673	96	0.0729167	801	0.0486891	0.0512821	1.8581	1	-10	AF188029-1
0.31964	1.29493	96	0.104167	801	0.082397	0.0847269	0.990419	1	-2	AF188029-1
0.0744251	7.99E-12	96	7.05E-14	801	0.00873908	0.00780379	3.18262	1	4	AF188029-1
0.634164	4.00E-10	96	2.50E-13	801	0.00062422	0.000557414	0.226457	1	6	AF188029-1
0.857216	1.02828	95	0.431579	804	0.424751	0.425473	0.0323707	1	0	AF188029-10
0.714284	1.15403	95	0.0421052	804	0.0366915	0.0372636	0.134035	1	-2	AF188029-10
0.44934	0.887774	95	0.378947	804	0.407338	0.404338	0.572316	1	2	AF188029-10
0.691359	0.869309	95	0.0473684	804	0.0541045	0.0533927	0.157618	1	8	AF188029-10
0.244804	1.36547	95	0.1	804	0.0752488	0.0778643	1.35271	1	4	AF188029-10
0.503764	4.00E-10	95	4.98E-13	804	0.00124378	0.00111235	0.446998	1	-4	AF188029-10
0.636436	5.51E-10	95	3.43E-13	804	0.000621891	0.000556174	0.223433	1	6	AF188029-10
0.717684	1.07492	94	0.18617	795	0.175472	0.176603	0.130723	1	0	AF188029-12
0.793631	0.926871	94	0.0744681	795	0.0798742	0.0793026	0.0684341	1	4	AF188029-12
0.634645	1.07691	94	0.579787	795	0.561635	0.563555	0.225814	1	-12	AF188029-12
0.438125	0.844172	94	0.138298	795	0.159748	0.15748	0.601188	1	-4	AF188029-12
0.862499	1.20931	94	0.0053191	795	0.00440252	0.00449944	0.0299959	1	12	AF188029-12
0.775155	0.843242	94	0.0159574	795	0.0188679	0.0185602	0.0815895	1	8	AF188029-12
0.196727	0.82086	97	0.536083	809	0.584672	0.57947	1.66651	1	0	AF188029-7
0.248982	1.19447	97	0.43299	809	0.389988	0.394592	1.32901	1	-4	AF188029-7
0.552933	1.47921	97	0.0154639	809	0.0105068	0.0110375	0.35209	1	2	AF188029-7
0.53362	0.55371	97	0.00515461	809	0.00927071	0.00883002	0.387493	1	-2	AF188029-7
0.340916	1.01E-10	97	2.51E-13	809	0.00247219	0.00220751	0.906983	1	6	AF188029-7
0.191893	3.36041	97	0.0103093	809	0.00309024	0.00386313	1.70302	1	4	AF188029-7
0.639475	1.09324	63	0.5	449	0.477728	0.480469	0.219429	1	0	AF287957-1
0.0672424	0.692098	63	0.308524	449	0.393096	0.382812	3.34908	1	-6	AF287957-1
0.880581	1.06508	63	0.0555556	449	0.0523385	0.0527344	0.0225698	1	-4	AF287957-1
0.475142	1.51682	63	0.0317459	449	0.0211581	0.0224609	0.509994	1	2	AF287957-1
0.0257079	3.04845	63	0.0555556	449	0.0189309	0.0234375	4.97556	1	4	AF287957-1
0.423074	1.60292	63	0.0317461	449	0.0200445	0.0214844	0.641761	1	-2	AF287957-1
0.945167	0.949461	63	0.015873	449	0.0167038	0.0166016	0.0047303	1	-14	AF287957-1
0.11589	1.67752	100	0.065	867	0.0397924	0.0423992	2.472	1	-12	D8S1130
0.968953	0.993269	100	0.245	867	0.246251	0.246122	0.00151491	1	4	D8S1130
0.818831	1.04133	100	0.235	867	0.227797	0.228542	0.0524635	1	-8	D8S1130
0.215316	0.78042	100	0.155	867	0.190311	0.18666	1.53532	1	0	D8S1130
0.973375	0.991546	100	0.095	867	0.0957324	0.0956567	0.00111396	1	8	D8S1130
0.720807	0.927687	100	0.145	867	0.154556	0.153568	0.127721	1	-4	D8S1130
0.441571	1.33774	100	0.045	867	0.0340254	0.0351603	0.592198	1	12	D8S1130
0.978816	1.0202	100	0.01	867	0.00980392	0.0098242	0.000705048	1	16	D8S1130
0.0330666	79563.9	100	0.00499945	867	6.32E-08	0.000517063	4.54233	1	20	D8S1130
0.418155	4.07E-12	100	7.05E-15	867	0.0017301	0.00155119	0.655494	1	2	D8S1130
0.837578	1.03489	99	0.282828	839	0.275924	0.276652	0.0420219	1	0	D8S1469
0.909489	1.01727	99	0.469697	839	0.465435	0.465885	0.0129239	1	4	D8S1469
0.405936	1.18419	99	0.171717	839	0.148987	0.151386	0.69067	1	8	D8S1469
0.237766	0.657424	99	0.0404039	839	0.0601907	0.0581023	1.39379	1	3	D8S1469
0.704869	1.27538	99	0.0151515	839	0.011919	0.0122601	0.143456	1	12	D8S1469
0.20717	0.546562	99	0.0202021	839	0.0363528	0.0346482	1.5911	1	-4	D8S1469
0.504045	1.40E-12	99	1.67E-16	839	0.0011919	0.0010661	0.446409	1	7	D8S1469
0.20041	0.81685	90	0.422222	845	0.472189	0.46738	1.63938	1	0	D8S1695
0.891445	1.04602	90	0.0611111	845	0.0585799	0.0588235	0.0186255	1	10	D8S1695
0.67357	0.899543	90	0.105556	845	0.115976	0.114973	0.177455	1	4	D8S1695
0.666936	0.921986	90	0.216667	845	0.230769	0.229412	0.185207	1	8	D8S1695

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FIG. 6C. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.167565	1.7815	90	0.0444445	845	0.0254438	0.0272727	1.9046	1	12	D8S1695
0.00785119	2.01962	90	0.122222	845	0.064487	0.0700535	7.06711	1	6	D8S1695
0.968082	1.04345	90	0.00555556	845	0.00532544	0.00534759	0.00160115	1	14	D8S1695
0.935689	1.04419	90	0.0222222	845	0.0213018	0.0213904	0.00651081	1	2	D8S1695
0.233447	3.37E-13	90	1.40E-15	845	0.00414201	0.00374332	1.41974	1	16	D8S1695
0.524484	4.71E-13	90	5.58E-16	845	0.00118343	0.00106952	0.405068	1	-4	D8S1695
0.652729	1.90E-10	90	1.12E-13	845	0.000591716	0.000534759	0.202477	1	9	D8S1695
0.348647	0.840511	96	0.213542	643	0.244168	0.240189	0.878374	1	34	D8S1721
0.152584	0.50491	96	0.0208333	643	0.0404355	0.037889	2.04623	1	36	D8S1721
0.916389	1.01665	96	0.411458	643	0.407465	0.407984	0.0110214	1	0	D8S1721
0.785034	0.937634	96	0.119792	643	0.12675	0.125846	0.0744005	1	2	D8S1721
0.064966	1.54723	96	0.140625	643	0.0956454	0.101488	3.40584	1	4	D8S1721
0.0841884	1.79531	96	0.0677084	643	0.0388802	0.0426252	2.98213	1	24	D8S1721
0.360592	8.65E-12	96	2.02E-14	643	0.00233281	0.00202977	0.83583	1	30	D8S1721
0.565421	0.666315	96	0.0104167	643	0.0155521	0.014885	0.330405	1	8	D8S1721
0.807385	0.835523	96	0.0104166	643	0.0124417	0.0121786	0.0594389	1	32	D8S1721
0.23772	1.71E-12	96	6.89E-15	643	0.00388802	0.00338295	1.39406	1	26	D8S1721
0.479937	0.512687	96	0.00520834	643	0.0101089	0.00947226	0.499006	1	38	D8S1721
0.597747	4.11E-11	96	3.20E-14	643	0.000777605	0.00067659	0.278407	1	6	D8S1721
0.597747	4.11E-11	96	3.20E-14	643	0.000777605	0.00067659	0.278407	1	-2	D8S1721
0.597747	4.11E-11	96	3.20E-14	643	0.000777605	0.00067659	0.278407	1	-4	D8S1721
0.142602	0.801487	101	0.564356	866	0.617783	0.612203	2.14965	1	0	D8S1759
0.397877	0.793563	101	0.0742575	866	0.0918014	0.089969	0.714734	1	2	D8S1759
0.33652	1.34288	101	0.069307	866	0.0525404	0.0542916	0.923645	1	10	D8S1759
0.357415	1.22571	101	0.138614	866	0.116051	0.118407	0.846955	1	12	D8S1759
0.962661	1.02935	101	0.0148515	866	0.0144342	0.0144778	0.00219159	1	8	D8S1759
0.466242	1.40237	101	0.029703	866	0.0213626	0.0222337	0.530869	1	6	D8S1759
0.0763703	1.62526	101	0.0940594	866	0.0600462	0.0635988	3.1405	1	4	D8S1759
0.504658	0.533584	101	0.00495051	866	0.00923787	0.00879007	0.445127	1	16	D8S1759
0.544336	0.656155	101	0.00990101	866	0.0150115	0.0144778	0.367562	1	14	D8S1759
0.415705	4.59E-12	101	7.96E-15	866	0.0017321	0.00155119	0.662425	1	-2	D8S1759
0.373568	1.18012	63	0.5	702	0.458689	0.462092	0.791763	1	0	D8S1825
0.322396	0.685215	63	0.0555556	702	0.0790598	0.0771242	0.9792	1	8	D8S1825
0.593823	1.15537	63	0.142857	702	0.126068	0.127451	0.284413	1	10	D8S1825
0.0933142	0.649083	63	0.134921	702	0.193732	0.188889	2.81625	1	6	D8S1825
0.680675	1.59657	63	0.00793648	702	0.00498576	0.00522876	0.169367	1	-2	D8S1825
0.495342	1.216	63	0.126984	702	0.106838	0.108497	0.464902	1	2	D8S1825
0.119951	4.40E-11	63	4.43E-13	702	0.00997151	0.00915033	2.41798	1	12	D8S1825
0.25365	1.96863	63	0.031746	702	0.0163818	0.0176471	1.30309	1	4	D8S1825
0.353489	1.48E-11	63	5.28E-14	702	0.00356125	0.00326797	0.860894	1	-1	D8S1825
0.67839	1.14E-11	63	8.13E-15	702	0.000712251	0.000653595	0.171944	1	14	D8S1825
0.317308	1.18665	79	0.398734	841	0.358502	0.361957	1.00001	1	4	D8S265
0.672194	0.877854	79	0.0759494	841	0.0856124	0.0847826	0.179047	1	18	D8S265
0.0197552	2.24E-11	79	4.07E-13	841	0.0178359	0.0163043	5.4334	1	6	D8S265
0.790552	1.07922	79	0.0949367	841	0.088585	0.0891304	0.0705399	1	14	D8S265
0.11626	1.40175	79	0.202532	841	0.153389	0.157609	2.467	1	0	D8S265
0.265927	0.686637	79	0.056962	841	0.0808561	0.0788043	1.23764	1	-5	D8S265
0.260573	0.757916	79	0.120253	841	0.152794	0.15	1.26571	1	2	D8S265
0.757312	1.12702	79	0.0506329	841	0.0451843	0.0456522	0.0954888	1	12	D8S265
0.0798753	2.92E-12	79	2.98E-14	841	0.010107	0.00923913	3.06744	1	16	D8S265
0.671704	2.16E-10	79	1.29E-13	841	0.00059453	0.000543478	0.179615	1	-3	D8S265
0.462784	1.45E-12	79	2.60E-15	841	0.00178359	0.00163043	0.539152	1	10	D8S265
0.343023	3.46E-12	79	1.03E-14	841	0.00297265	0.00271739	0.899099	1	8	D8S265
0.671704	2.16E-10	79	1.29E-13	841	0.00059453	0.000543478	0.179615	1	20	D8S265
0.671704	2.16E-10	79	1.29E-13	841	0.00059453	0.000543478	0.179615	1	1	D8S265
0.671704	2.16E-10	79	1.29E-13	841	0.00059453	0.000543478	0.179615	1	-4	D8S265
0.700978	1.12637	64	0.101562	762	0.0912074	0.0920097	0.147457	1	0	D8S351
0.160376	1.35485	64	0.257812	762	0.204068	0.208232	1.97068	1	18	D8S351

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FIG. 6D. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.140611	1.36696	64	0.273438	762	0.215879	0.220339	2.17126	1	2	D8S351
0.0828	0.610815	64	0.101563	762	0.156168	0.151937	3.00906	1	6	D8S351
0.714128	0.844366	64	0.0390625	762	0.0459318	0.0453995	0.134188	1	20	D8S351
0.0874914	1.42E-11	64	1.70E-13	762	0.011811	0.0108959	2.91993	1	10	D8S351
0.475253	0.758494	64	0.0546875	762	0.0708661	0.0696126	0.509735	1	4	D8S351
0.329101	0.689311	64	0.0546874	762	0.0774278	0.0756659	0.952431	1	8	D8S351
0.641023	1.70641	64	0.0078125	762	0.00459317	0.00484262	0.217407	1	-2	D8S351
0.627473	1.16309	64	0.101563	762	0.0885827	0.0895884	0.235503	1	16	D8S351
0.230432	0.355762	64	0.00781248	762	0.0216535	0.0205811	1.43819	1	14	D8S351
0.132055	1.12E-12	64	1.03E-14	762	0.00918635	0.00847458	2.26817	1	12	D8S351
0.421546	1.39E-10	64	3.67E-13	762	0.00262467	0.00242131	0.646001	1	22	D8S351
0.720445	0.943516	98	0.322917	825	0.335758	0.334419	0.128067	1	-6	D8S503
0.368534	1.19191	98	0.197917	825	0.171515	0.174267	0.8086	1	-2	D8S503
0.650243	0.928762	98	0.317708	825	0.333939	0.332248	0.205594	1	0	D8S503
0.55512	0.814091	98	0.046875	825	0.0569697	0.0559175	0.348225	1	-4	D8S503
0.143381	1.53953	98	0.0833333	825	0.0557576	0.0586319	2.14129	1	-8	D8S503
0.158706	3.62E-12	98	1.98E-14	825	0.00545455	0.00488599	1.98651	1	4	D8S503
0.776741	0.885429	98	0.03125	825	0.0351515	0.0347448	0.080411	1	2	D8S503
0.418197	9.71E-12	98	1.77E-14	825	0.00181818	0.00162866	0.661029	1	-10	D8S503
0.250019	8.33E-13	98	3.04E-15	825	0.00363636	0.00325733	1.3232	1	-12	D8S503
0.0265688	0.718366	101	0.50495	876	0.586758	0.578301	4.91862	1	2	D8S516
0.12838	1.30831	101	0.247525	876	0.200913	0.205732	2.31198	1	4	D8S516
0.804679	1.06406	101	0.0990099	876	0.0936073	0.0941658	0.0611552	1	-2	D8S516
0.351225	1.2526	101	0.113861	876	0.0930365	0.0951894	0.869025	1	0	D8S516
0.0144311	8.78888	101	0.0148514	876	0.00171234	0.00307062	5.98463	1	8	D8S516
0.262284	0.373998	101	0.00495048	876	0.0131279	0.0122825	1.25666	1	6	D8S516
0.624055	1.37502	101	0.0148514	876	0.0108448	0.011259	0.240209	1	-4	D8S516
0.147569	1.2585	95	0.415789	663	0.361237	0.368074	2.0972	1	6	D8S520
0.0793509	0.702699	95	0.163158	663	0.217195	0.210422	3.07815	1	8	D8S520
0.0737204	0.236635	95	0.00526315	663	0.0218703	0.0197889	3.19818	1	10	D8S520
0.454748	1.19606	95	0.126316	663	0.107843	0.110158	0.558791	1	0	D8S520
0.681499	0.875169	95	0.0578948	663	0.0656109	0.0646438	0.168443	1	-10	D8S520
0.643367	0.886546	95	0.0947369	663	0.105581	0.104222	0.214366	1	2	D8S520
0.155991	1.39865	95	0.136842	663	0.10181	0.106201	2.01267	1	4	D8S520
0.119945	7.46E-12	95	5.10E-14	663	0.00678733	0.00593668	2.41804	1	-12	D8S520
0.604736	9.35E-12	95	7.06E-15	663	0.000754148	0.000659631	0.267911	1	9	D8S520
0.0614545	3.16E-16	95	3.13E-18	663	0.00980392	0.0085752	3.49769	1	-2	D8S520
0.46409	1.17E-13	95	1.77E-16	663	0.0015083	0.00131926	0.536012	1	12	D8S520
0.160754	0.808303	97	0.474227	840	0.527381	0.521878	1.96712	1	0	D8S542
0.00752838	1.67593	97	0.22165	840	0.145238	0.153148	7.14237	1	4	D8S542
0.554142	0.907693	97	0.304124	840	0.325	0.322839	0.349949	1	2	D8S542
0.417889	1.77E-10	97	3.16E-13	840	0.00178571	0.00160085	0.656244	1	-2	D8S542
0.64009	4.66E-14	97	2.78E-17	840	0.000595238	0.000533618	0.218624	1	-12	D8S542
0.709164	1.10417	93	0.0967742	814	0.0884521	0.0893054	0.139113	1	-8	D8S550
0.820119	1.05534	93	0.123656	814	0.117936	0.118523	0.0517073	1	12	D8S550
0.55045	0.826982	93	0.0591398	814	0.0706388	0.0694598	0.356512	1	-6	D8S550
0.07782	0.726739	93	0.22043	814	0.280098	0.27398	3.10985	1	14	D8S550
0.170811	0.72134	93	0.107527	814	0.14312	0.139471	1.87581	1	-2	D8S550
0.064467	2.12756	93	0.0483871	814	0.0233415	0.0259096	3.41856	1	8	D8S550
0.395481	1.28543	93	0.0806452	814	0.0638821	0.0656009	0.722025	1	10	D8S550
0.0975753	1.77163	93	0.0645162	814	0.0374693	0.0402426	2.74473	1	18	D8S550
0.343372	1.63802	93	0.0268817	814	0.0165848	0.0176406	0.897801	1	20	D8S550
0.487631	1.19986	93	0.102151	814	0.0866093	0.0882029	0.481749	1	16	D8S550
0.656014	1.14821	93	0.0698925	814	0.0614251	0.0622933	0.198401	1	0	D8S550
0.162329	6.71E-12	93	3.73E-14	814	0.00552826	0.00496141	1.9524	1	2	D8S550
0.351936	2.92E-14	93	7.19E-17	814	0.002457	0.00220507	0.866466	1	22	D8S550
0.51053	1.09E-10	93	1.35E-13	814	0.0012285	0.00110254	0.43298	1	6	D8S550
0.51053	1.09E-10	93	1.35E-13	814	0.0012285	0.00110254	0.43298	1	4	D8S550

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FIG. 6E. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.136893	0.656779	27	0.5	391	0.603581	0.59689	2.21254	1	1	DG00AAHBG
0.136893	1.52258	27	0.5	391	0.398419	0.40311	2.21254	1	2	DG00AAHBG
0.300119	0.81773	66	0.659091	725	0.702759	0.699115	1.07366	1	2	DG00AAHBH
0.300119	1.2229	66	0.340909	725	0.297241	0.300885	1.07366	1	1	DG00AAHBH
0.247129	0.797863	62	0.629032	811	0.680025	0.676403	1.33946	1	3	DG00AAHBI
0.247129	1.25335	62	0.370968	811	0.319975	0.323597	1.33946	1	1	DG00AAHBI
0.259878	1.25165	86	0.232558	531	0.194915	0.200162	1.26941	1	0	DG8S117
0.259878	0.798948	86	0.767442	531	0.805085	0.799838	1.26941	1	9	DG8S117
0.949601	0.983559	101	0.910891	826	0.912228	0.912082	0.00399521	1	0	DG8S118
0.949601	1.01672	101	0.0891089	826	0.0877724	0.087918	0.00399521	1	5	DG8S118
0.247725	0.826649	87	0.396552	604	0.442881	0.437048	1.33609	1	0	DG8S127
0.51935	0.845888	87	0.103448	604	0.120033	0.117945	0.415183	1	6	DG8S127
0.0968201	1.30975	87	0.5	604	0.432947	0.441389	2.75716	1	1	DG8S127
0.245581	8.27E-12	87	3.44E-14	604	0.00413908	0.00361795	1.34827	1	2	DG8S127
0.677323	0.92813	93	0.736559	646	0.750774	0.748985	0.173155	1	0	DG8S128
0.677323	1.07744	93	0.263441	646	0.249226	0.251015	0.173155	1	4	DG8S128
0.610112	0.920497	92	0.353261	772	0.372409	0.37037	0.260012	1	4	DG8S130
0.334773	0.860241	92	0.5	772	0.537565	0.533565	0.930347	1	0	DG8S130
0.986165	0.987072	92	0.0108696	772	0.0110104	0.0109954	0.000300713	1	-4	DG8S130
0.291287	4.2132	92	0.00543485	772	0.00129533	0.00173611	1.11366	1	12	DG8S130
0.00263246	2.62787	92	0.0869566	772	0.0349741	0.0405093	9.04617	1	-16	DG8S130
0.664976	1.18581	92	0.0434783	772	0.0369171	0.0376157	0.187536	1	8	DG8S130
0.244659	6.34E-13	92	2.47E-15	772	0.00388601	0.00347222	1.35355	1	-12	DG8S130
0.410915	2.49E-11	92	4.84E-14	772	0.00194301	0.00173611	0.676151	1	-8	DG8S130
0.71498	1.08295	98	0.862245	739	0.852503	0.853644	0.133354	1	0	DG8S134
0.592821	0.888749	98	0.132653	739	0.14682	0.145161	0.285961	1	4	DG8S134
0.183435	7.57438	98	0.00510204	739	0.00067659	0.00119474	1.76957	1	2	DG8S134
0.774126	1.04852	92	0.668478	779	0.657895	0.659013	0.0823589	1	0	DG8S136
0.39935	0.705966	92	0.0326087	779	0.0455712	0.0442021	0.710282	1	6	DG8S136
0.986516	1.00499	92	0.076087	779	0.0757381	0.075775	0.000285615	1	-6	DG8S136
0.803865	1.09048	92	0.0543478	779	0.0500642	0.0505166	0.0616768	1	2	DG8S136
0.940311	1.02503	92	0.0597826	779	0.0584082	0.0585534	0.00560683	1	4	DG8S136
0.641268	0.84886	92	0.0489131	779	0.0571245	0.0562572	0.217088	1	-4	DG8S136
0.251291	0.532858	92	0.0163044	779	0.0301669	0.0287026	1.31611	1	-2	DG8S136
0.636514	4.82E-11	92	3.09E-14	779	0.000641849	0.000574053	0.22333	1	-10	DG8S136
0.412203	1.52634	92	0.0271739	779	0.0179718	0.0189437	0.672438	1	8	DG8S136
0.290348	3.25E-12	92	1.05E-14	779	0.00320924	0.00287026	1.11801	1	-8	DG8S136
0.288632	4.2514	92	0.00543481	779	0.00128369	0.00172218	1.12599	1	10	DG8S136
0.0861802	5.69597	92	0.0108696	779	0.00192555	0.00287026	2.94432	1	-14	DG8S136
0.131675	0.554385	19	0.210526	234	0.324786	0.316206	2.27265	1	-2	DG8S137
0.0225578	1.08030	19	0.0263127	234	2.50E-07	0.00197628	5.20224	1	16	DG8S137
0.24739	1.87447	19	0.131579	234	0.0747863	0.0790514	1.33798	1	2	DG8S137
0.616114	1.29561	19	0.131579	234	0.104701	0.106719	0.251367	1	6	DG8S137
0.971193	1.02778	19	0.0526315	234	0.0512821	0.0513834	0.00130407	1	10	DG8S137
0.558647	0.780645	19	0.184211	234	0.224359	0.221344	0.342052	1	0	DG8S137
0.470942	1.46008	19	0.131579	234	0.0940171	0.0968379	0.519764	1	-4	DG8S137
0.753076	0.825975	19	0.0789474	234	0.0940171	0.0928854	0.0889647	1	4	DG8S137
0.697516	1.55406	19	0.0263158	234	0.017094	0.0177866	0.151068	1	12	DG8S137
0.428411	1.33E-11	19	1.14E-13	234	0.008547	0.00790514	0.627129	1	8	DG8S137
0.692589	1.98E-10	19	4.23E-13	234	0.00213875	0.00197628	0.156297	1	14	DG8S137
0.193815	6.29729	19	0.0263158	234	0.00427351	0.00592885	1.68838	1	18	DG8S137
0.0595046	0.607662	91	0.0824176	761	0.128778	0.123826	3.55114	1	-1	DG8S138
0.0563616	1.65529	91	0.917582	761	0.870565	0.875587	3.64134	1	0	DG8S138
0.634523	4.06E-10	91	2.67E-13	761	0.00065703	0.000586854	0.225977	1	1	DG8S138
0.992623	1.00158	81	0.401235	585	0.400855	0.400901	8.55E-05	1	0	DG8S147
0.990781	1.00198	81	0.598765	585	0.598291	0.598348	0.000133512	1	2	DG8S147
0.610492	1.11E-12	81	9.53E-16	585	0.0008547	0.000750751	0.25946	1	1	DG8S147
0.306745	0.715394	97	0.0515464	694	0.0706052	0.068268	1.04464	1	-4	DG8S148

FIG. 6F. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.189157	1.24392	97	0.324742	694	0.278818	0.28445	1.72417	1	2	DG8S148
0.0232615	0.644275	97	0.170103	694	0.241354	0.232617	5.14887	1	-2	DG8S148
0.486186	1.11554	97	0.402062	694	0.376081	0.379267	0.484957	1	0	DG8S148
0.499249	1.31378	97	0.0412371	694	0.0317003	0.0328698	0.456533	1	4	DG8S148
0.00372723	78879.2	97	0.0103083	694	1.32E-07	0.00126422	8.41214	1	6	DG8S148
0.469286	5.48E-11	97	7.91E-14	694	0.00144092	0.00126422	0.523658	1	-17	DG8S148
0.113102	1.39634	50	0.51	473	0.427061	0.43499	2.51033	1	-2	DG8S153
0.755554	0.90203	50	0.11	473	0.120507	0.119503	0.0969232	1	0	DG8S153
0.630406	0.626936	50	0.01	473	0.0158562	0.0152964	0.231511	1	-6	DG8S153
0.0818552	0.540989	50	0.0799999	473	0.138478	0.132887	3.02767	1	8	DG8S153
0.843493	0.938637	50	0.12	473	0.12685	0.126195	0.0389776	1	6	DG8S153
0.940056	1.03404	50	0.06	473	0.0581395	0.0583174	0.005655	1	10	DG8S153
0.693522	0.815219	50	0.04	473	0.0486258	0.0478011	0.155299	1	2	DG8S153
0.836	1.13938	50	0.0299999	473	0.0264271	0.0267686	0.0428544	1	14	DG8S153
0.934189	1.05269	50	0.0299999	473	0.0285412	0.0286807	0.00681865	1	4	DG8S153
0.315528	1.24E-11	50	6.58E-14	473	0.00528541	0.00478011	1.0074	1	12	DG8S153
0.480374	2.37881	50	0.0100001	473	0.00422832	0.00478011	0.498013	1	-4	DG8S153
0.691922	0.906871	43	0.290698	453	0.311258	0.309476	0.157012	1	4	DG8S155
0.260822	1.47027	43	0.139535	453	0.0993377	0.102823	1.26439	1	8	DG8S155
0.613999	1.38763	43	0.0348837	453	0.0253863	0.0262097	0.254392	1	14	DG8S155
0.980677	0.990648	43	0.0930232	453	0.093819	0.09375	0.000586596	1	2	DG8S155
0.316582	0.759107	43	0.197674	453	0.245033	0.240927	1.00302	1	6	DG8S155
0.682666	0.825983	43	0.0581394	453	0.0695364	0.0685484	0.16714	1	10	DG8S155
0.45664	1.29768	43	0.127907	453	0.101545	0.103831	0.554118	1	0	DG8S155
0.319621	0.515476	43	0.0232558	453	0.0441501	0.0423387	0.990498	1	12	DG8S155
0.331856	3.54119	43	0.0116279	453	0.00331126	0.00403226	0.841641	1	-10	DG8S155
0.128687	10.6473	43	0.011628	453	0.00110374	0.00201613	2.30827	1	-16	DG8S155
0.670119	8.40E-13	43	9.28E-16	453	0.00110375	0.00100808	0.181463	1	-2	DG8S155
0.128687	10.6473	43	0.011628	453	0.00110374	0.00201613	2.30827	1	-12	DG8S155
0.460382	1.52E-11	43	5.04E-14	453	0.00331126	0.00302419	0.544968	1	16	DG8S155
0.40513	1.14371	89	0.41573	777	0.383526	0.386836	0.693046	1	6	DG8S156
0.245044	0.83143	89	0.522472	777	0.568211	0.56351	1.35134	1	0	DG8S156
0.20887	1.63587	89	0.0505618	777	0.0315315	0.0334873	1.57924	1	-6	DG8S156
0.401222	2.9209	89	0.00561798	777	0.0019305	0.00230947	0.704662	1	3	DG8S156
0.265718	0.376077	89	0.00561801	777	0.0148005	0.0138568	1.23872	1	9	DG8S156
0.33947	0.732904	82	0.920732	556	0.940647	0.938088	0.912432	1	0	DG8S159
0.475481	1.29748	82	0.0609756	556	0.0476619	0.049373	0.509211	1	-2	DG8S159
0.502159	1.57525	82	0.0182927	556	0.0116906	0.0125392	0.450371	1	2	DG8S159
0.365296	0.8673	95	0.389474	735	0.42381	0.41988	0.819604	1	0	DG8S161
0.365296	1.153	95	0.610528	735	0.57619	0.58012	0.819604	1	2	DG8S161
0.104578	1.27982	97	0.530928	815	0.469325	0.475877	2.6343	1	0	DG8S163
0.104578	0.781357	97	0.469072	815	0.530675	0.524123	2.6343	1	3	DG8S163
0.616405	1.09015	83	0.349398	759	0.33004	0.331948	0.250952	1	0	DG8S170
0.438895	0.877032	83	0.620482	759	0.650856	0.647862	0.599168	1	2	DG8S170
0.413258	1.60494	83	0.0240964	759	0.0151515	0.0160333	0.68941	1	-4	DG8S170
0.266779	4.59391	83	0.00602407	759	0.00131753	0.00178147	1.23323	1	-19	DG8S170
0.519255	9.02E-11	83	1.19E-13	759	0.00131752	0.00118765	0.415373	1	-2	DG8S170
0.519255	9.02E-11	83	1.19E-13	759	0.00131752	0.00118765	0.415373	1	-8	DG8S170
0.139776	0.791041	95	0.378947	643	0.435459	0.428184	2.18043	1	14	DG8S177
0.693639	0.675133	95	0.00526316	643	0.00777605	0.00745257	0.155174	1	20	DG8S177
0.278312	1.49758	95	0.0526316	643	0.0357698	0.0379404	1.17531	1	10	DG8S177
0.364696	1.17506	95	0.268421	643	0.237947	0.24187	0.821658	1	12	DG8S177
0.653875	1.12247	95	0.105263	643	0.0948678	0.096206	0.201049	1	18	DG8S177
0.82908	1.05125	95	0.131579	643	0.125972	0.126694	0.0466051	1	16	DG8S177
0.457668	9.87E-11	95	1.54E-13	643	0.00155521	0.00135501	0.551597	1	2	DG8S177
0.880841	0.951725	95	0.0578947	643	0.0606532	0.0602981	0.0224708	1	0	DG8S177
0.724908	0.944594	87	0.511494	622	0.525723	0.523977	0.123839	1	0	DG8S179
0.724908	1.05866	87	0.488506	622	0.474277	0.476023	0.123839	1	7	DG8S179

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FIG. 6G. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.762507	0.948204	95	0.263158	625	0.2736	0.272222	0.0913188	1	10	DG8S181
0.143746	0.763986	95	0.21579	625	0.2648	0.258333	2.1374	1	12	DG8S181
0.180075	1.39938	95	0.121053	625	0.0896	0.09375	1.79701	1	0	DG8S181
0.624977	1.1672	95	0.0684211	625	0.0592	0.0604167	0.238934	1	14	DG8S181
0.0951353	0.638224	95	0.0789474	625	0.1184	0.113194	2.78526	1	4	DG8S181
0.0858196	1.43454	95	0.184211	625	0.136	0.142361	2.95109	1	8	DG8S181
0.846265	0.91141	95	0.0263158	625	0.0288	0.0284722	0.0375919	1	18	DG8S181
0.953238	0.93953	95	0.00526315	625	0.0056	0.00555556	0.00343875	1	6	DG8S181
0.506027	1.47192	95	0.0210526	625	0.0144	0.0152778	0.442274	1	16	DG8S181
0.205305	3.31384	95	0.0105263	625	0.0032	0.00416667	1.60423	1	-2	DG8S181
0.84956	0.821429	95	0.00526316	625	0.0064	0.00625	0.0359784	1	2	DG8S181
0.351987	0.752231	68	0.897059	818	0.920538	0.918736	0.866281	1	0	DG8S182
0.351987	1.32938	68	0.102941	818	0.0794621	0.0812641	0.866281	1	-3	DG8S182
0.457958	0.867661	81	0.734568	641	0.76131	0.75831	0.550882	1	0	DG8S188
0.457958	1.15252	81	0.265432	641	0.23869	0.24169	0.550882	1	-1	DG8S188
0.419757	1.1713	59	0.59322	568	0.554577	0.558214	0.650995	1	0	DG8S192
0.51537	1.17558	59	0.194915	568	0.170775	0.173046	0.423149	1	2	DG8S192
0.207352	0.338217	59	0.00847457	568	0.0246479	0.023126	1.58982	1	16	DG8S192
0.677246	1.16807	59	0.0762712	568	0.0660211	0.0669856	0.173242	1	4	DG8S192
0.245975	0.658408	59	0.0677967	568	0.0994718	0.0964912	1.34602	1	-2	DG8S192
0.57227	0.800065	59	0.059322	568	0.0730634	0.0717703	0.318899	1	12	DG8S192
0.319662	2.38E-12	59	1.05E-14	568	0.00440141	0.00398724	0.990328	1	8	DG8S192
0.373517	7.84E-11	59	2.77E-13	568	0.00352113	0.00318979	0.791929	1	10	DG8S192
0.529354	1.62E-13	59	2.87E-16	568	0.00176056	0.0015949	0.395632	1	-4	DG8S192
0.529354	1.62E-13	59	2.87E-16	568	0.00176056	0.0015949	0.395632	1	14	DG8S192
0.0217834	0.700803	97	0.546392	730	0.632192	0.622128	5.26301	1	0	DG8S197
0.0217834	1.42694	97	0.453608	730	0.367808	0.377872	5.26301	1	1	DG8S197
0.0928033	1.29436	98	0.566327	677	0.502216	0.510323	2.82506	1	0	DG8S201
0.935151	0.98689	98	0.331633	677	0.334564	0.334194	0.00662036	1	4	DG8S201
0.0212726	0.54752	98	0.0765306	677	0.131462	0.124516	5.30432	1	-2	DG8S201
0.628116	0.798125	98	0.0255102	677	0.0317578	0.0309677	0.234624	1	2	DG8S201
0.779148	0.906211	97	0.948454	735	0.953061	0.952524	0.0786405	1	0	DG8S212
0.779148	1.1035	97	0.0515464	735	0.0469388	0.047476	0.0786405	1	2	DG8S212
0.501767	0.866166	53	0.613207	392	0.646684	0.642697	0.451197	1	4	DG8S215
0.469316	1.1675	53	0.386792	392	0.350765	0.355056	0.523585	1	0	DG8S215
0.476067	6.32E-11	53	1.62E-13	392	0.00255102	0.00224719	0.507858	1	2	DG8S215
0.0493249	1.4219	83	0.445783	292	0.361301	0.38	3.86426	1	0	DG8S221
0.492758	1.14224	83	0.301205	292	0.273973	0.28	0.470498	1	5	DG8S221
0.357409	0.668952	83	0.0361446	292	0.0530822	0.0493333	0.846976	1	7	DG8S221
0.922396	0.974125	83	0.120482	292	0.123288	0.122667	0.00948998	1	4	DG8S221
0.00198543	0.416254	83	0.0783132	292	0.169521	0.149333	9.56296	1	-2	DG8S221
0.868514	0.878049	83	0.0120482	292	0.0136986	0.0133333	0.0274055	1	1	DG8S221
0.479182	4.03E-11	83	6.91E-14	292	0.00171233	0.00133333	0.500724	1	8	DG8S221
0.655811	1.76363	83	0.00602407	292	0.00342466	0.004	0.198652	1	-1	DG8S221
0.787685	1.04516	94	0.340426	726	0.330578	0.331707	0.0725321	1	0	DG8S232
0.458767	1.12444	94	0.409575	726	0.381543	0.384756	0.548901	1	2	DG8S232
0.0538268	0.622749	94	0.0957447	726	0.145317	0.139634	3.71806	1	-8	DG8S232
0.695287	1.11362	94	0.0904255	726	0.0819559	0.0829268	0.153421	1	-4	DG8S232
0.965139	0.982323	94	0.0372341	726	0.0378788	0.0378049	0.00191022	1	4	DG8S232
0.519055	1.38954	94	0.0265958	726	0.0192837	0.020122	0.41577	1	-2	DG8S232
0.621627	8.43E-13	94	5.81E-16	726	0.000688705	0.000609756	0.243588	1	-6	DG8S232
0.323362	1.26E-10	94	3.48E-13	726	0.00275482	0.00243902	0.9753	1	6	DG8S232
0.0309669	2.01171	96	0.953125	672	0.90997	0.915365	4.6548	1	0	DG8S238
0.0309669	0.497086	96	0.0468749	672	0.0900298	0.0846354	4.6548	1	-8	DG8S238
0.120276	0.73024	57	0.570176	476	0.644958	0.636961	2.41372	1	4	DG8S242
0.120276	1.36941	57	0.429825	476	0.355042	0.363039	2.41372	1	0	DG8S242
0.130702	1.55627	93	0.930108	468	0.895299	0.90107	2.28415	1	0	DG8S245
0.926667	0.969323	93	0.0591398	468	0.0608974	0.0606061	0.00847127	1	-4	DG8S245

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FIG. 6H. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	Info	allele	marker
0.326233	0.851099	84	0.529762	682	0.569648	0.565274	0.963792	1	0	DG8S249
0.396524	1.19007	84	0.208333	682	0.181085	0.184073	0.718843	1	-19	DG8S249
0.92549	1.06008	84	0.0178572	682	0.0168622	0.0169713	0.00874613	1	-17	DG8S249
0.278027	0.382948	84	0.00595238	682	0.0153959	0.0143603	1.17671	1	-21	DG8S249
0.901316	0.966221	84	0.0952381	682	0.0982405	0.0979112	0.0153757	1	-2	DG8S249
0.701106	1.35743	84	0.0119048	682	0.00879766	0.00913838	0.147323	1	6	DG8S249
0.356731	1.39991	84	0.0595237	682	0.0432551	0.0450392	0.849367	1	2	DG8S249
0.0202989	3.87E-12	84	6.64E-14	682	0.0168622	0.0150131	5.386	1	-6	DG8S249
0.95049	0.95464	84	0.0119047	682	0.0124633	0.0124021	0.00385535	1	4	DG8S249
0.201691	1.05E-11	84	5.43E-14	682	0.00513197	0.00456919	1.63009	1	-1	DG8S249
0.0945611	1.89873	84	0.0595238	682	0.0322581	0.035248	2.79496	1	-4	DG8S249
0.394709	1.31798	98	0.0677083	584	0.052226	0.0544118	0.724387	1	-10	DG8S250
0.354176	0.841246	96	0.213542	584	0.244007	0.239706	0.85844	1	-4	DG8S250
0.668478	1.10211	96	0.140625	584	0.129281	0.130882	0.183387	1	2	DG8S250
0.278992	1.22976	96	0.223958	584	0.190088	0.194853	1.17199	1	4	DG8S250
0.0750708	0.71287	96	0.192708	584	0.250856	0.242647	3.16851	1	0	DG8S250
0.481973	1.23503	96	0.078125	584	0.0642123	0.0661765	0.494395	1	-2	DG8S250
0.896366	1.10718	96	0.0104167	584	0.00941781	0.00955882	0.0169659	1	8	DG8S250
0.0784271	2.81235	96	0.0260417	584	0.00941781	0.0117647	3.0972	1	-8	DG8S250
0.695254	0.790201	96	0.015625	584	0.0196918	0.0191176	0.153456	1	6	DG8S250
0.760007	1.22011	96	0.015625	584	0.0128425	0.0132353	0.0933133	1	-12	DG8S250
0.90986	1.0747	96	0.015625	584	0.0145548	0.0147059	0.0128176	1	-6	DG8S250
0.269464	7.68E-14	96	2.64E-16	584	0.00342466	0.00294118	1.21947	1	12	DG8S250
0.751011	0.949842	92	0.619565	680	0.631618	0.630181	0.100683	1	0	DG8S257
0.95664	1.00924	92	0.315217	680	0.313235	0.313472	0.00295614	1	-2	DG8S257
0.770454	1.11429	92	0.0489131	680	0.0441176	0.0446891	0.0851363	1	-6	DG8S257
0.942723	1.05652	92	0.0108696	680	0.0102941	0.0103627	0.00516202	1	2	DG8S257
0.187243	7.42615	92	0.00543476	680	0.000735298	0.00129534	1.73918	1	-9	DG8S257
0.599971	1.11205	83	0.216867	637	0.199372	0.201389	0.275039	1	15	DG8S258
0.208266	1.23457	83	0.602409	637	0.55102	0.556944	1.58344	1	18	DG8S258
0.0488866	0.650118	83	0.150602	637	0.214286	0.206944	3.87924	1	12	DG8S258
0.0470735	1.80E-15	83	2.29E-17	637	0.0125589	0.0111111	3.94276	1	0	DG8S258
0.483799	3.57E-11	83	5.61E-14	637	0.00156986	0.00138889	0.490289	1	33	DG8S258
0.483799	3.57E-11	83	5.61E-14	637	0.00156986	0.00138889	0.490289	1	24	DG8S258
0.706939	1.23358	83	0.0240964	637	0.0196232	0.0201389	0.141353	1	21	DG8S258
0.0375366	58362.2	83	0.0060233	637	1.04E-07	0.000694444	4.3259	1	11	DG8S258
0.759909	0.936597	57	0.692982	549	0.70674	0.705446	0.0933912	1	2	DG8S261
0.759909	1.06769	57	0.307018	549	0.29326	0.294554	0.0933912	1	0	DG8S261
0.969404	1.02076	55	0.0363637	561	0.0356506	0.0357143	0.00147113	1	-4	DG8S262
0.683866	0.921811	55	0.509091	561	0.529412	0.527597	0.165808	1	0	DG8S262
0.843058	0.931097	55	0.0818182	561	0.087344	0.0868506	0.0391974	1	-10	DG8S262
0.216881	1.32844	55	0.272727	561	0.220143	0.224838	1.52489	1	2	DG8S262
0.603723	0.739227	55	0.0272726	561	0.0365419	0.0357143	0.269417	1	-2	DG8S262
0.767637	0.880436	55	0.0545455	561	0.0614973	0.0608766	0.0873005	1	4	DG8S262
0.86772	1.1358	55	0.0181818	561	0.0160428	0.0162338	0.0277405	1	6	DG8S262
0.386639	2.81E-11	55	1.01E-13	561	0.00356506	0.00324675	0.749485	1	8	DG8S262
0.150491	8.87E-13	55	8.79E-15	561	0.00980392	0.00892857	2.06726	1	-14	DG8S262
0.233927	1.24619	97	0.231959	751	0.195073	0.199292	1.41682	1	15	DG8S265
0.823939	1.03482	97	0.56701	751	0.558589	0.559552	0.0494978	1	18	DG8S265
0.0311666	2.75E-12	97	3.53E-14	751	0.0126498	0.0112028	4.64376	1	0	DG8S265
0.189591	0.772375	97	0.170103	751	0.20972	0.205189	1.7208	1	12	DG8S265
0.485625	4.63E-11	97	6.17E-14	751	0.00133156	0.00117925	0.486205	1	33	DG8S265
0.473203	1.44523	97	0.0257732	751	0.017976	0.0188679	0.514486	1	21	DG8S265
0.925649	1.10659	97	0.00515466	751	0.00466045	0.00471698	0.00870867	1	-6	DG8S265
0.631697	1.08177	85	0.476471	615	0.456911	0.459286	0.229767	1	-2	DG8S266
0.777865	0.954415	85	0.423529	615	0.434959	0.433571	0.0795817	1	0	DG8S266
0.74591	0.916458	85	0.1	615	0.10813	0.107143	0.105	1	-4	DG8S266
0.484424	1.11477	97	0.417526	741	0.391363	0.394391	0.488888	1	-4	DG8S269



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FIG. 6I. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.111271	0.783298	97	0.520619	741	0.580972	0.573986	2.53608	1	0	DG8S269
0.0207518	2.31734	97	0.0618557	741	0.0276653	0.0316229	5.34751	1	-5	DG8S269
0.0125222	0.536447	50	0.19	567	0.304233	0.294976	6.23539	1	-2	DG8S271
0.0965033	1.44289	50	0.69	567	0.606702	0.613452	2.7624	1	0	DG8S271
0.673308	1.16162	50	0.1	567	0.0873016	0.0883306	0.177756	1	2	DG8S271
0.0272474	11.5511	50	0.02	567	0.00176366	0.00324149	4.87506	1	4	DG8S271
0.201722	2.20843	95	0.0210526	674	0.00964392	0.0110533	1.62986	1	-6	DG8S277
0.0361748	1.41743	95	0.347368	674	0.272997	0.282185	4.38885	1	10	DG8S277
0.63596	0.921088	95	0.268421	674	0.284866	0.282835	0.224065	1	0	DG8S277
0.865799	0.951486	95	0.0736842	674	0.0771513	0.076723	0.0285598	1	-2	DG8S277
0.0947257	0.726956	95	0.189474	674	0.243323	0.236671	2.79217	1	2	DG8S277
0.241235	0.640208	95	0.0368422	674	0.0563798	0.0539662	1.37337	1	8	DG8S277
0.956609	0.96694	95	0.0157895	674	0.0163205	0.0162549	0.00296041	1	4	DG8S277
0.25043	1.15E-12	95	4.27E-15	674	0.0037092	0.00325098	1.32091	1	14	DG8S277
0.0578435	2.71467	95	0.0315789	674	0.0118694	0.0143043	3.59816	1	6	DG8S277
0.161764	0.304808	95	0.00526316	674	0.0170623	0.0156047	1.95766	1	12	DG8S277
0.577818	1.58274	95	0.0105263	674	0.00667656	0.00715215	0.309775	1	-4	DG8S277
0.765951	1.05169	83	0.60241	576	0.590278	0.591806	0.0886105	1	0	DG8S285
0.684656	0.929874	83	0.307229	576	0.322917	0.320941	0.164932	1	2	DG8S285
0.742479	1.10872	83	0.0783133	576	0.0711805	0.0720789	0.10796	1	1	DG8S285
0.716093	0.768292	83	0.0120482	576	0.015625	0.0151745	0.132267	1	-1	DG8S285
0.571041	0.909551	87	0.586207	500	0.609	0.605622	0.320945	1	0	DG8S291
0.9626	1.00913	87	0.235632	500	0.234	0.234242	0.00219873	1	4	DG8S291
0.0818958	1.52991	87	0.149425	500	0.103	0.109881	3.02687	1	2	DG8S291
0.0664868	0.38118	87	0.0172414	500	0.044	0.0400341	3.36769	1	-2	DG8S291
0.858761	1.15116	87	0.0114942	500	0.01	0.0102215	0.0316667	1	6	DG8S291
0.988027	1.00277	80	0.7125	729	0.711934	0.71199	0.000225189	1	2	DG8S292
0.988027	0.997243	80	0.2875	729	0.288066	0.28801	0.000225189	1	0	DG8S292
0.831828	1.03936	90	0.255555	727	0.248281	0.249082	0.0450957	1	12	DG8S297
0.551964	0.905275	90	0.327778	727	0.350069	0.347613	0.353811	1	0	DG8S297
0.593688	0.820513	90	0.0444444	727	0.0536451	0.0526316	0.284622	1	14	DG8S297
0.933583	0.980521	90	0.127778	727	0.129986	0.129743	0.00694513	1	4	DG8S297
0.974297	0.984668	90	0.0277778	727	0.0281981	0.0281518	0.00103809	1	10	DG8S297
0.290398	1.27318	90	0.15	727	0.121733	0.124847	1.11778	1	16	DG8S297
0.223202	0.347581	90	0.00555553	727	0.0158184	0.0146879	1.48366	1	8	DG8S297
0.464751	1.4551	90	0.0277778	727	0.0192572	0.0201958	0.534428	1	18	DG8S297
0.0530974	3.64899	90	0.0222222	727	0.00618982	0.00795594	3.74085	1	-4	DG8S297
0.379013	0.552111	90	0.0111111	727	0.019945	0.0189718	0.773901	1	6	DG8S297
0.62894	7.55E-10	90	5.20E-13	727	0.000687757	0.000611995	0.233501	1	2	DG8S297
0.146628	6.57E-12	90	4.09E-14	727	0.00618982	0.00550796	2.10599	1	-2	DG8S297
0.484916	0.874705	98	0.795918	726	0.816804	0.81432	0.487787	1	0	DG8S298
0.503167	1.13979	98	0.193878	726	0.174242	0.176578	0.448251	1	2	DG8S298
0.864815	1.14116	98	0.0102041	726	0.00895316	0.00910194	0.0289844	1	1	DG8S298
0.945889	1.01429	87	0.816092	602	0.813953	0.814224	0.00460641	1	0	DG8S301
0.945889	0.985915	87	0.183908	602	0.186047	0.185776	0.00460641	1	1	DG8S301
0.575354	1.0993	86	0.366279	666	0.344595	0.347074	0.313806	1	26	DG8S302
0.771509	0.950489	86	0.30814	666	0.319069	0.317819	0.0843334	1	28	DG8S302
0.345297	0.781118	86	0.0988373	666	0.123123	0.120346	0.890667	1	24	DG8S302
0.629411	1.17834	86	0.0639535	666	0.0548048	0.0558511	0.23286	1	30	DG8S302
0.882719	1.03304	86	0.162791	666	0.158408	0.15891	0.0217632	1	0	DG8S302
0.701115	1.07445	88	0.767045	756	0.753968	0.755332	0.147314	1	2	DG8S303
0.30383	2.47127	88	0.0113637	756	0.00462963	0.00533175	1.05731	1	4	DG8S303
0.569859	0.897809	88	0.221591	756	0.240741	0.238744	0.322918	1	-2	DG8S303
0.638818	9.80E-13	88	6.48E-16	756	0.000661376	0.000592417	0.220291	1	0	DG8S303
0.323683	1.27067	51	0.754902	315	0.707936	0.714481	0.974008	1	4	DG8S307
0.573528	0.843182	51	0.137255	315	0.15873	0.155738	0.316815	1	0	DG8S307
0.922209	0.948194	51	0.0392157	315	0.0412698	0.0409836	0.00953574	1	8	DG8S307
0.425627	0.726679	51	0.0686275	315	0.0920635	0.0887878	0.634727	1	-4	DG8S307



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FIG. 6J. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.171256	0.801526	90	0.577778	689	0.630624	0.624519	1.87192	1	0	DG8S308
0.265085	1.25437	90	0.2	689	0.166183	0.17009	1.242	1	2	DG8S308
0.369125	1.26411	90	0.111111	689	0.0899855	0.0924262	0.806607	1	-14	DG8S308
0.391559	1.31527	90	0.0722222	689	0.0558781	0.0577664	0.734097	1	-4	DG8S308
0.710487	1.23	90	0.0222222	689	0.0181422	0.0186136	0.137791	1	4	DG8S308
0.175154	0.418852	90	0.0111111	689	0.0261248	0.0243902	1.83827	1	-6	DG8S308
0.340146	0.422097	90	0.00555554	689	0.0130624	0.0121951	0.909881	1	-2	DG8S308
0.859898	0.832488	99	0.00505051	660	0.00606061	0.00592885	0.0311539	1	8	DG8S316
0.808112	0.960815	99	0.308081	660	0.316667	0.315547	0.0589821	1	10	DG8S316
0.375005	1.14554	99	0.464646	660	0.431061	0.435441	0.787011	1	0	DG8S316
0.129566	0.664218	99	0.0757576	660	0.109848	0.105402	2.2977	1	12	DG8S316
0.867332	1.04077	99	0.116162	660	0.112121	0.112648	0.0279053	1	14	DG8S316
0.319464	1.61875	99	0.030303	660	0.0189394	0.0204216	0.99114	1	16	DG8S316
0.16135	2.63E-12	99	1.40E-14	660	0.00530303	0.00461133	1.96153	1	2	DG8S316
0.720932	1.07685	52	0.423077	606	0.405116	0.406535	0.127601	1	2	DG8S322
0.685172	0.788479	52	0.0288462	606	0.0363036	0.0357143	0.164362	1	10	DG8S322
0.268308	1.25949	52	0.423077	606	0.367987	0.37234	1.22537	1	0	DG8S322
0.0129756	0.365904	52	0.0480769	606	0.121287	0.115502	6.17244	1	4	DG8S322
0.773078	1.11905	52	0.0769231	606	0.0693069	0.0699088	0.0831461	1	6	DG8S322
0.735723	0.944798	100	0.715	700	0.726429	0.725	0.113921	1	0	DG8S323
0.735723	1.05843	100	0.285	700	0.273571	0.275	0.113921	1	5	DG8S323
0.63791	1.08125	97	0.314433	695	0.297842	0.299874	0.221486	1	0	DG8S324
0.298388	1.58857	97	0.0360825	695	0.0230216	0.0246212	1.08138	1	10	DG8S324
0.890423	0.974756	97	0.216495	695	0.220863	0.220328	0.0189804	1	8	DG8S324
0.466028	0.865511	97	0.175258	695	0.197122	0.194444	0.531379	1	2	DG8S324
0.316602	0.775253	97	0.0927836	695	0.116547	0.113636	1.00293	1	6	DG8S324
0.529445	1.15254	97	0.139175	695	0.123022	0.125	0.395457	1	4	DG8S324
0.715962	1.1993	97	0.0257732	695	0.0215827	0.022096	0.132395	1	12	DG8S324
0.321194	0.785941	93	0.107527	726	0.13292	0.130037	0.984077	1	-4	DG8S332
0.877088	0.954194	93	0.0698925	726	0.0730028	0.0726498	0.0239204	1	4	DG8S332
0.206955	0.790105	93	0.208678	726	0.251377	0.246642	1.5926	1	2	DG8S332
0.0425925	1.41167	93	0.327957	726	0.256887	0.264957	4.1115	1	0	DG8S332
0.530606	0.889209	93	0.215054	726	0.235537	0.233211	0.393231	1	-2	DG8S332
0.710218	1.16902	93	0.0376344	726	0.0323691	0.032967	0.13806	1	6	DG8S332
0.217107	1.8282	93	0.0322581	726	0.0179063	0.019536	1.52339	1	-6	DG8S332
0.0559242	0.696624	87	0.224138	539	0.293135	0.283546	3.65431	1	-5	DG8S333
0.0559242	1.43549	87	0.775862	539	0.706865	0.716454	3.65431	1	0	DG8S333
0.00198166	0.188537	8	0.25	173	0.638728	0.621547	9.56645	1	1	INVSNP
0.00198166	5.304	8	0.75	173	0.361272	0.378453	9.56645	1	2	INVSNP
0.131157	0.790449	99	0.358586	764	0.414267	0.407879	2.27876	1	1	SG08S100
0.131157	1.2651	99	0.641414	764	0.585733	0.592121	2.27876	1	2	SG08S100
0.0167769	0.877563	97	0.386598	387	0.481912	0.46281	5.71957	1	1	SG08S102
0.0167769	1.47588	97	0.613402	387	0.518088	0.53719	5.71957	1	2	SG08S102
0.437006	0.878672	100	0.64	390	0.669231	0.663265	0.604132	1	0	SG08S112
0.437006	1.13808	100	0.36	390	0.330769	0.336735	0.604132	1	2	SG08S112
0.377735	0.874364	99	0.520202	700	0.553571	0.549437	0.778059	1	0	SG08S120
0.377735	1.14369	99	0.479798	700	0.446429	0.450563	0.778059	1	2	SG08S120
0.190291	0.801929	98	0.69898	746	0.743298	0.738152	1.71536	1	0	SG08S138
0.190291	1.24699	98	0.30102	746	0.256702	0.261848	1.71536	1	2	SG08S138
0.00149864	0.471507	59	0.720339	391	0.845269	0.828889	10.0803	1	1	SG08S139
0.00149864	2.12086	59	0.279681	391	0.154731	0.171111	10.0803	1	0	SG08S139
0.144357	0.800952	99	0.510101	713	0.565217	0.558498	2.13089	1	0	SG08S15
0.144357	1.24851	99	0.489899	713	0.434783	0.441502	2.13089	1	2	SG08S15
0.157518	1.23964	99	0.50505	701	0.451498	0.458125	1.9979	1	0	SG08S26
0.157518	0.806684	99	0.494949	701	0.548502	0.541875	1.9979	1	2	SG08S26
0.133952	1.26805	100	0.505	397	0.445844	0.457746	2.2461	1	2	SG08S27
0.133952	0.788614	100	0.495	397	0.554156	0.542254	2.2461	1	1	SG08S27
0.141165	0.787135	97	0.561856	397	0.619647	0.6083	2.16521	1	1	SG08S32

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FIG. 6K. Allelic Association for Bipolar Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.141165	1.27043	97	0.438144	397	0.380353	0.3917	2.16521	1	0	SG08S32
0.145678	1.25902	99	0.646465	618	0.592233	0.599721	2.11696	1	1	SG08S35
0.145676	0.794271	99	0.353535	618	0.407767	0.400279	2.11696	1	2	SG08S35
0.212203	0.824463	100	0.45	523	0.498088	0.490369	1.55634	1	1	SG08S39
0.212203	1.21291	100	0.55	523	0.501912	0.509631	1.55634	1	0	SG08S39
0.648445	1.07374	98	0.403061	689	0.386067	0.388183	0.207867	1	0	SG08S42
0.648445	0.931322	98	0.596939	689	0.613933	0.611817	0.207867	1	2	SG08S42
0.305752	1.27727	99	0.126263	610	0.101639	0.105078	1.04894	1	1	SG08S46
0.305752	0.782919	99	0.873737	610	0.898361	0.894922	1.04894	1	3	SG08S46
0.0276381	0.711727	96	0.520833	743	0.604307	0.594756	4.8505	1	0	SG08S5
0.0276381	1.40503	96	0.479167	743	0.395693	0.405244	4.8505	1	2	SG08S5
0.684951	1.06429	98	0.454082	685	0.438686	0.440613	0.164606	1	2	SG08S50
0.684951	0.939598	98	0.545918	685	0.561314	0.559387	0.164606	1	0	SG08S50
0.00650408	0.643485	96	0.4375	381	0.547244	0.525157	7.40506	1	0	SG08S506
0.00650408	1.55404	96	0.5625	381	0.452756	0.474843	7.40506	1	2	SG08S506
0.228808	0.816667	99	0.318182	396	0.363636	0.354545	1.44826	1	2	SG08S507
0.228808	1.22449	99	0.681818	396	0.636364	0.645455	1.44826	1	3	SG08S507
0.094402	0.759538	96	0.375	392	0.441327	0.428279	2.79766	1	1	SG08S508
0.094402	1.31659	96	0.625	392	0.558673	0.571721	2.79766	1	3	SG08S508
0.590396	1.11521	96	0.807292	371	0.789757	0.793362	0.289727	1	1	SG08S510
0.590396	0.896691	96	0.192708	371	0.210243	0.206638	0.289727	1	0	SG08S510
0.872061	0.973708	96	0.401042	362	0.407459	0.406114	0.0259341	1	0	SG08S511
0.872061	1.027	96	0.598958	362	0.592541	0.593886	0.0259341	1	3	SG08S511
0.781	1.04689	95	0.410527	388	0.399485	0.401656	0.0772928	1	2	SG08S512
0.781	0.955211	95	0.589474	388	0.600516	0.598344	0.0772928	1	1	SG08S512
0.123314	0.781544	100	0.41	392	0.470663	0.458333	2.37472	1	1	SG08S517
0.123314	1.27952	100	0.59	392	0.529337	0.541667	2.37472	1	3	SG08S517
0.0911794	1.31381	100	0.625	397	0.559194	0.572435	2.85343	1	1	SG08S520
0.0911794	0.761143	100	0.375	397	0.440806	0.427565	2.85343	1	0	SG08S520
0.789675	0.953493	98	0.719388	391	0.7289	0.726994	0.0711465	1	2	SG08S6
0.789675	1.04877	98	0.280612	391	0.2711	0.273008	0.0711465	1	0	SG08S6
0.128973	0.781948	96	0.442708	380	0.503947	0.491597	2.30483	1	1	SG08S70
0.128973	1.27886	96	0.557292	380	0.496053	0.508403	2.30483	1	3	SG08S70
0.0117352	1.47013	99	0.60101	740	0.506081	0.517282	6.35045	1	0	SG08S71
0.0117352	0.680212	99	0.39899	740	0.493919	0.482718	6.35045	1	2	SG08S71
0.0424166	0.720449	97	0.43299	378	0.51455	0.497895	4.1185	1	3	SG08S73
0.0424166	1.38802	97	0.56701	378	0.48545	0.502105	4.1185	1	1	SG08S73
0.0850867	0.758593	99	0.409091	394	0.477157	0.463489	2.96496	1	1	SG08S76
0.0850867	1.31823	99	0.590909	394	0.522843	0.536511	2.96496	1	2	SG08S76
0.391224	1.1464	99	0.545455	394	0.511421	0.518256	0.735135	1	0	SG08S90
0.391224	0.872294	99	0.454545	394	0.488579	0.481744	0.735135	1	1	SG08S90
0.168061	0.773965	101	0.777228	705	0.81844	0.813275	1.90016	1	1	SG08S93
0.168061	1.29205	101	0.222772	705	0.18156	0.186725	1.90016	1	2	SG08S93
0.159581	0.775408	91	0.28022	362	0.334254	0.3234	1.97819	1	0	SG08S94
0.159581	1.28964	91	0.71978	362	0.665746	0.6768	1.97819	1	2	SG08S94
0.0266379	1.40786	99	0.49495	586	0.41041	0.422628	4.91413	1	2	SG08S95
0.0266379	0.710299	99	0.505051	586	0.58959	0.577372	4.91413	1	3	SG08S95
0.504013	1.10942	100	0.605	613	0.579935	0.58345	0.446476	1	2	SG08S96
0.504013	0.901372	100	0.395	613	0.420065	0.41655	0.446476	1	3	SG08S96
0.892559	1.0344	100	0.9	713	0.896914	0.897294	0.0182431	1	0	SG08S97
0.892559	0.966742	100	0.1	713	0.103086	0.102706	0.0182431	1	1	SG08S97

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FIG. 7A. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.363622	0.836763	60	0.616667	811	0.65783	0.654994	0.825344	1	4	AC022239-5
0.305708	1.24469	60	0.283333	811	0.24106	0.243972	1.04913	1	0	AC022239-5
0.977998	1.0095	60	0.083333	811	0.0826141	0.0826636	0.000760585	1	8	AC022239-5
0.512664	1.39E-10	60	2.58E-13	811	0.00184957	0.00172216	0.428626	1	-12	AC022239-5
0.69447	1.35763	60	0.0166666	811	0.0123305	0.0126292	0.154289	1	-4	AC022239-5
0.316991	1.51E-11	60	6.55E-14	811	0.00431566	0.00401837	1.00132	1	-8	AC022239-5
0.111109	1.59559	55	0.154546	574	0.102787	0.107313	2.53838	1	12	AC068974-2
0.723343	1.08063	55	0.3	574	0.283972	0.285374	0.125312	1	14	AC068974-2
0.432112	0.70124	55	0.0454546	574	0.0635889	0.0620032	0.61714	1	10	AC068974-2
0.287331	0.805706	55	0.390909	574	0.44338	0.438792	1.13208	1	0	AC068974-2
0.604326	1.26692	55	0.0545454	574	0.043554	0.0445151	0.26852	1	16	AC068974-2
0.225515	1.51E-16	55	1.06E-18	574	0.00696864	0.0063593	1.46893	1	20	AC068974-2
0.335492	0.526588	55	0.0181817	574	0.0339721	0.0325914	0.927581	1	6	AC068974-2
0.121956	4.11E-12	55	4.71E-14	574	0.011324	0.0103339	2.39201	1	8	AC068974-2
0.0378667	5.33647	55	0.0272728	574	0.00522647	0.00715421	4.311	1	18	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	2	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	15	AC068974-2
0.335342	3.50155	55	0.00909095	574	0.00261323	0.00317965	0.928159	1	-2	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	13	AC068974-2
0.111109	1.59559	55	0.154546	574	0.102787	0.107313	2.53838	1	12	AC068974-2
0.723343	1.08063	55	0.3	574	0.283972	0.285374	0.125312	1	14	AC068974-2
0.432112	0.70124	55	0.0454546	574	0.0635889	0.0620032	0.61714	1	10	AC068974-2
0.287331	0.805706	55	0.390909	574	0.44338	0.438792	1.13208	1	0	AC068974-2
0.604326	1.26692	55	0.0545454	574	0.043554	0.0445151	0.26852	1	16	AC068974-2
0.225515	1.51E-16	55	1.06E-18	574	0.00696864	0.0063593	1.46893	1	20	AC068974-2
0.335492	0.526588	55	0.0181817	574	0.0339721	0.0325914	0.927581	1	6	AC068974-2
0.121956	4.11E-12	55	4.71E-14	574	0.011324	0.0103339	2.39201	1	8	AC068974-2
0.0378667	5.33647	55	0.0272728	574	0.00522647	0.00715421	4.311	1	18	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	2	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	15	AC068974-2
0.335342	3.50155	55	0.00909095	574	0.00261323	0.00317965	0.928159	1	-2	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.00087108	0.000794913	0.18308	1	13	AC068974-2
0.59902	1.14583	58	0.172414	780	0.153846	0.155131	0.276476	1	0	AF131215-1
0.299873	0.805799	58	0.293104	780	0.339744	0.336516	1.07476	1	2	AF131215-1
0.998415	1.00041	58	0.310345	780	0.310256	0.310263	3.94E-06	1	-2	AF131215-1
0.372986	0.552631	58	0.0172414	780	0.0307692	0.0298329	0.793693	1	22	AF131215-1
0.723982	1.18777	58	0.0431035	780	0.0365385	0.0369928	0.124709	1	10	AF131215-1
0.562829	1.45259	58	0.025862	780	0.0179487	0.0184964	0.334829	1	-4	AF131215-1
0.699929	0.821431	58	0.0344828	780	0.0416667	0.0411695	0.148546	1	8	AF131215-1
0.320657	1.45959	58	0.0775862	780	0.0544872	0.0560859	0.986266	1	4	AF131215-1
0.294411	2.04424	58	0.025862	780	0.0128205	0.0137232	1.09934	1	-6	AF131215-1
0.592101	1.18E-14	58	1.52E-17	780	0.00128205	0.00119332	0.287074	1	12	AF131215-1
0.704833	4.37E-12	58	2.80E-15	780	0.000641025	0.000596659	0.143493	1	6	AF131215-1
0.697802	0.929521	61	0.516394	780	0.534615	0.533294	0.150769	1	0	AF131215-2
0.579915	1.11131	61	0.426229	780	0.400641	0.402497	0.306372	1	4	AF131215-2
0.690189	0.844827	61	0.0491803	780	0.0576923	0.0570749	0.158881	1	8	AF131215-2
0.501289	1.79E-11	61	3.45E-14	780	0.00192308	0.00178359	0.452205	1	-8	AF131215-2
0.676324	1.60332	61	0.00819677	780	0.0051282	0.00535077	0.174294	1	-4	AF131215-2
0.478237	0.870426	58	0.396552	795	0.430189	0.427902	0.502881	1	0	AF131215-4
0.184845	1.29107	58	0.5	795	0.436478	0.440797	1.75824	1	14	AF131215-4
0.634514	0.838932	58	0.0689655	795	0.0811321	0.0803048	0.225988	1	12	AF131215-4
0.12748	0.285477	58	0.0086207	795	0.0295597	0.028136	2.32292	1	8	AF131215-4
0.407604	1.7323	58	0.025862	795	0.0150943	0.0158265	0.68578	1	16	AF131215-4
0.357529	6.82E-12	58	2.58E-14	795	0.00377359	0.003517	0.848552	1	18	AF131215-4
0.401027	1.09E-10	58	3.45E-13	795	0.00314465	0.00293083	0.705246	1	10	AF131215-4
0.70741	1.51E-13	58	9.51E-17	795	0.000628931	0.000586166	0.140878	1	4	AF131215-4
0.0963016	1.76706	57	0.105263	801	0.062422	0.0652681	2.76575	1	-6	AF188029-1
0.142988	0.734164	57	0.280702	801	0.347066	0.342657	2.14551	1	0	AF188029-1

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FIG. 7B. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.434288	0.590808	57	0.0175439	801	0.0293383	0.0285548	0.611329	1	-12	AF188029-1
0.832498	1.05185	57	0.210526	801	0.202247	0.202797	0.0447331	1	-4	AF188029-1
0.475623	0.83072	57	0.157895	801	0.184145	0.182401	0.508884	1	-8	AF188029-1
0.965978	1.02281	57	0.0350877	801	0.0343321	0.0343823	0.00181925	1	2	AF188029-1
0.184115	1.67473	57	0.0789474	801	0.0486891	0.0506993	1.76409	1	-10	AF188029-1
0.261327	1.43339	57	0.114035	801	0.082397	0.0844988	1.26172	1	-2	AF188029-1
0.164433	3.63E-11	57	3.20E-13	801	0.00873908	0.00815851	1.93298	1	4	AF188029-1
0.710751	3.94E-10	57	2.46E-13	801	0.000624219	0.000582751	0.137528	1	6	AF188029-1
0.621405	1.10038	58	0.448276	804	0.424751	0.426334	0.243897	1	0	AF188029-10
0.901714	0.937651	58	0.0344828	804	0.0366915	0.0365429	0.0152515	1	-2	AF188029-10
0.127551	0.736929	58	0.336207	804	0.407338	0.402552	2.32207	1	2	AF188029-10
0.778226	1.12275	58	0.0603448	804	0.0541045	0.0545244	0.0793164	1	8	AF188029-10
0.0990892	1.68676	58	0.12069	804	0.0752488	0.0783083	2.72014	1	4	AF188029-10
0.597494	1.96E-10	58	2.45E-13	804	0.00124378	0.00116009	0.278792	1	-4	AF188029-10
0.708924	1.64E-10	58	1.02E-13	804	0.000621891	0.000580046	0.139354	1	6	AF188029-10
0.579137	1.14863	58	0.198429	795	0.175472	0.176851	0.307631	1	0	AF188029-12
0.985476	1.00657	56	0.0803571	795	0.0798742	0.079908	0.000331374	1	4	AF188029-12
0.593852	0.900594	56	0.535714	795	0.561635	0.569929	0.284369	1	-12	AF188029-12
0.978505	1.0072	56	0.160714	795	0.159748	0.159812	0.00072591	1	-4	AF188029-12
0.543585	2.03734	58	0.00892862	795	0.00440251	0.00470035	0.368935	1	12	AF188029-12
0.938849	0.945455	56	0.0178571	795	0.0188679	0.0188014	0.00588534	1	8	AF188029-12
0.835837	0.961074	60	0.575	809	0.584672	0.584005	0.0429404	1	0	AF188029-7
0.691804	1.07951	60	0.408333	809	0.389988	0.391254	0.15714	1	-4	AF188029-7
0.81474	0.791399	60	0.00833334	809	0.0105068	0.0103567	0.0549035	1	2	AF188029-7
0.142015	3.24E-12	60	3.03E-14	809	0.00927071	0.00863061	2.15599	1	-2	AF188029-7
0.449054	2.42E-10	60	6.00E-13	809	0.00247219	0.0023015	0.573038	1	6	AF188029-7
0.417341	2.71092	60	0.00833333	809	0.00309024	0.00345224	0.657791	1	4	AF188029-7
0.417636	1.20832	40	0.525	449	0.477728	0.481595	0.656957	1	0	AF287957-1
0.0581369	0.822981	40	0.2875	449	0.393096	0.384458	3.58975	1	-8	AF287957-1
0.239885	0.464266	40	0.025	449	0.0523385	0.0501022	1.38127	1	-4	AF287957-1
0.149224	2.4349	40	0.05	449	0.0211581	0.0235174	2.08017	1	2	AF287957-1
0.0339226	3.45491	40	0.0625001	449	0.018931	0.0224949	4.4986	1	4	AF287957-1
0.345145	1.90477	40	0.0375001	449	0.0200445	0.0214724	0.891226	1	-2	AF287957-1
0.767846	0.745149	40	0.0125	449	0.0167038	0.0163599	0.0871392	1	-14	AF287957-1
0.368674	1.46881	61	0.0573771	867	0.0397924	0.0409483	0.808129	1	-12	D8S1130
0.16812	1.33239	61	0.303279	867	0.246251	0.25	1.89963	1	4	D8S1130
0.868403	0.963438	61	0.221312	867	0.227797	0.227371	0.0274522	1	-8	D8S1130
0.0912015	0.642196	61	0.131148	867	0.190311	0.186422	2.85304	1	0	D8S1130
0.699451	1.12656	61	0.106557	867	0.0957324	0.096444	0.149044	1	8	D8S1130
0.47914	0.825683	61	0.131148	867	0.154556	0.153017	0.500819	1	-4	D8S1130
0.941492	0.962366	61	0.0327869	867	0.0340254	0.033944	0.00538681	1	12	D8S1130
0.857508	0.834711	61	0.00819672	867	0.00980392	0.00969828	0.032237	1	16	D8S1130
0.0195481	149070	61	0.00819593	867	5.54E-08	0.000538793	5.4518	1	20	D8S1130
0.522835	1.35E-11	61	2.34E-14	867	0.0017301	0.00161638	0.408298	1	2	D8S1130
0.825877	0.954251	60	0.266667	839	0.275924	0.275306	0.0483969	1	0	D8S1469
0.704363	1.07443	60	0.483333	839	0.465435	0.46663	0.143973	1	4	D8S1469
0.450413	1.21164	60	0.175	839	0.148987	0.150723	0.569613	1	8	D8S1469
0.191474	0.538409	60	0.0333333	839	0.0601807	0.0583982	1.70624	1	3	D8S1469
0.270889	2.12565	60	0.0250001	839	0.0119189	0.012792	1.21224	1	12	D8S1469
0.211151	0.449292	60	0.0166667	839	0.0363528	0.0350389	1.56352	1	-4	D8S1469
0.599038	3.19E-12	60	3.80E-15	839	0.00111919	0.00111235	0.276449	1	7	D8S1469
0.864964	1.03499	52	0.480769	845	0.472189	0.472687	0.0289198	1	0	D8S1695
0.71935	1.15974	52	0.0673076	845	0.0585799	0.0590858	0.129116	1	10	D8S1695
0.749008	0.90158	52	0.105769	845	0.115976	0.115385	0.102369	1	4	D8S1695
0.355556	0.793651	52	0.192308	845	0.230769	0.22854	0.85353	1	8	D8S1695
0.834287	1.13769	52	0.0288462	845	0.0254438	0.025641	0.0437674	1	12	D8S1695
0.23416	1.54304	52	0.0981539	845	0.064497	0.0663322	1.41541	1	6	D8S1695
0.602845	1.81336	52	0.0096153	845	0.00532545	0.00557414	0.270726	1	14	D8S1695

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FIG. 7C. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.885143	0.900869	52	0.0192307	845	0.0213018	0.0211817	0.0208667	1	2	D8S1695
0.36004	8.49E-11	52	3.53E-13	845	0.00414201	0.0039019	0.837755	1	16	D8S1695
0.624919	5.76E-12	52	6.83E-15	845	0.00118343	0.00111483	0.239014	1	-4	D8S1695
0.729607	2.79E-14	52	1.65E-17	845	0.000591716	0.000557414	0.119473	1	9	D8S1695
0.80841	1.0553	59	0.254237	643	0.244168	0.245014	0.0587953	1	34	D8S1721
0.158461	0.409152	59	0.0169492	643	0.0404355	0.0384615	1.98885	1	36	D8S1721
0.461971	0.884658	59	0.372881	643	0.407465	0.404558	0.541116	1	0	D8S1721
0.595841	1.15963	59	0.144068	643	0.12675	0.128205	0.281315	1	2	D8S1721
0.432878	1.27283	59	0.118644	643	0.0956454	0.0975783	0.615089	1	4	D8S1721
0.0775081	2.0411	59	0.0762712	643	0.0388803	0.0420228	3.1164	1	24	D8S1721
0.467735	6.46E-11	59	1.51E-13	643	0.00233282	0.00213675	0.527321	1	30	D8S1721
0.512395	0.541025	59	0.00847456	643	0.0155521	0.0149573	0.429173	1	8	D8S1721
0.691622	0.678413	59	0.00847451	643	0.0124417	0.0121083	0.157335	1	32	D8S1721
0.348332	7.27E-11	59	2.84E-13	643	0.00388803	0.00356125	0.879525	1	26	D8S1721
0.129906	3.04E-15	59	3.10E-17	643	0.0101089	0.00925926	2.29362	1	38	D8S1721
0.675145	8.24E-11	59	6.41E-14	643	0.000777605	0.000712251	0.175643	1	6	D8S1721
0.675145	8.24E-11	59	6.41E-14	643	0.000777605	0.000712251	0.175643	1	-2	D8S1721
0.675145	8.24E-11	59	6.41E-14	643	0.000777605	0.000712251	0.175643	1	-4	D8S1721
0.0614298	0.704028	62	0.532258	866	0.617783	0.612069	3.49835	1	0	D8S1759
0.634574	1.15865	62	0.104839	866	0.0918014	0.0926724	0.225909	1	2	D8S1759
0.852221	1.07889	62	0.0564515	866	0.0525404	0.0528017	0.0347024	1	10	D8S1759
0.149653	1.46479	62	0.16129	866	0.116051	0.119073	2.07579	1	12	D8S1759
0.880877	1.11934	62	0.016129	866	0.0144342	0.0145474	0.0224573	1	8	D8S1759
0.683338	0.750997	62	0.016129	866	0.0213626	0.0210129	0.166393	1	6	D8S1759
0.225795	1.52383	62	0.0887097	866	0.0600462	0.0619612	1.46715	1	4	D8S1759
0.89257	0.871956	62	0.00806456	866	0.00923787	0.00915948	0.0182392	1	16	D8S1759
0.922244	1.07566	62	0.016129	866	0.0150115	0.0150862	0.00952714	1	14	D8S1759
0.519328	3.81E-10	62	6.62E-13	866	0.0017321	0.00161638	0.415229	1	-2	D8S1759
0.456297	1.18012	43	0.5	702	0.458689	0.461074	0.554962	1	0	D8S1825
0.24022	0.568227	43	0.0465116	702	0.0790598	0.0771812	1.3793	1	8	D8S1825
0.980318	1.01672	43	0.127907	702	0.126068	0.126174	0.00247554	1	10	D8S1825
0.316577	0.741137	43	0.151163	702	0.193732	0.191275	1.00304	1	6	D8S1825
0.361023	2.00E-14	43	1.00E-16	702	0.00498575	0.00469799	0.834332	1	-2	D8S1825
0.222186	1.48877	43	0.151163	702	0.106838	0.109396	1.49019	1	2	D8S1825
0.195893	8.13E-12	43	8.19E-14	702	0.00997151	0.00939597	1.67273	1	12	D8S1825
0.647625	1.42961	43	0.0232559	702	0.0163818	0.0167785	0.208908	1	4	D8S1825
0.440285	7.53E-12	43	2.69E-14	702	0.00356125	0.0033557	0.595538	1	-1	D8S1825
0.730184	1.47E-10	43	1.05E-13	702	0.000712251	0.000671141	0.118943	1	14	D8S1825
0.753881	1.07363	44	0.375	841	0.358502	0.359322	0.0982984	1	4	D8S265
0.317205	0.643406	44	0.0568181	841	0.0856124	0.0841808	1.00044	1	18	D8S265
0.078936	9.89E-13	44	1.80E-14	841	0.0178359	0.0169492	3.08667	1	6	D8S265
0.666891	1.17212	44	0.102273	841	0.088585	0.0892655	0.18526	1	14	D8S265
0.481601	1.22653	44	0.181818	841	0.153389	0.154802	0.495235	1	0	D8S265
0.395095	0.684796	44	0.0568181	841	0.0808561	0.079661	0.723203	1	-5	D8S265
0.897034	0.98109	44	0.147727	841	0.152794	0.152542	0.0167466	1	2	D8S265
0.172352	1.82619	44	0.0795455	841	0.0451843	0.0468927	1.86236	1	12	D8S265
0.186827	1.32E-11	44	1.35E-13	841	0.010107	0.00960452	1.74246	1	16	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.00059453	0.000564972	0.102022	1	-3	D8S265
0.579995	3.94E-11	44	7.04E-14	841	0.00178359	0.00169492	0.306242	1	10	D8S265
0.474836	1.14E-12	44	3.40E-15	841	0.00297265	0.00282486	0.5107	1	8	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.00059453	0.000564972	0.102022	1	20	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.00059453	0.000564972	0.102022	1	1	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.00059453	0.000564972	0.102022	1	-4	D8S265
0.993422	0.996403	33	0.0909091	762	0.0912073	0.091195	6.80E-05	1	0	D8S351
0.305742	1.35317	33	0.257576	762	0.204068	0.206289	1.04898	1	18	D8S351
0.430602	1.26016	33	0.257576	762	0.215879	0.21761	0.621199	1	2	D8S351
0.918456	0.964886	33	0.151515	762	0.156168	0.155975	0.0104814	1	6	D8S351
0.173787	0.31956	33	0.0151515	762	0.0459318	0.0446541	1.84997	1	20	D8S351

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FIG. 7D. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.215344	1.06E-11	33	1.26E-13	762	0.011811	0.0113208	1.53513	1	10	D8S351
0.400003	0.624339	33	0.0454545	762	0.0708661	0.0698113	0.708316	1	4	D8S351
0.603264	0.768725	33	0.060606	762	0.0774278	0.0767296	0.270101	1	8	D8S351
0.33331	3.33405	33	0.0151515	762	0.00459318	0.00503145	0.935995	1	-2	D8S351
0.634597	1.22072	33	0.106061	762	0.0885827	0.0893082	0.225878	1	16	D8S351
0.0926225	1.50E-11	33	3.32E-13	762	0.0216535	0.0207547	2.82819	1	14	D8S351
0.274837	2.84E-12	33	2.63E-14	762	0.00918635	0.00880503	1.19245	1	12	D8S351
0.56006	5.87E-14	33	1.54E-16	762	0.00262487	0.00251572	0.339601	1	22	D8S351
0.448788	0.854838	58	0.301724	825	0.335758	0.333522	0.573711	1	-6	D8S503
0.980215	1.00633	58	0.172414	825	0.171515	0.171574	0.000615032	1	-2	D8S503
0.321893	1.2189	58	0.37931	825	0.333939	0.33692	0.981241	1	0	D8S503
0.0359288	0.290408	58	0.0172414	825	0.0569697	0.0543601	4.40048	1	-4	D8S503
0.350094	1.42442	58	0.0775863	825	0.0557576	0.0571914	0.873115	1	-8	D8S503
0.26815	1.24E-11	58	6.78E-14	825	0.00545455	0.00509626	1.22619	1	4	D8S503
0.382595	1.49718	58	0.0517241	825	0.0351515	0.0362401	0.762346	1	2	D8S503
0.522981	2.30E-11	58	4.19E-14	825	0.00181818	0.00169875	0.40801	1	-10	D8S503
0.366136	1.20E-13	58	4.38E-16	825	0.00363636	0.00339751	0.816738	1	-12	D8S503
0.403745	0.855197	62	0.548387	876	0.586758	0.584222	0.697146	1	2	D8S516
0.385815	1.21411	62	0.233871	876	0.200913	0.203092	0.752091	1	4	D8S516
0.907354	1.03746	62	0.0967742	876	0.0936073	0.0938166	0.0135438	1	-2	D8S516
0.871696	0.948964	62	0.0887098	876	0.0930365	0.0927505	0.0260839	1	0	D8S516
0.00364776	14.4546	62	0.0241935	876	0.00171233	0.00319829	8.45133	1	8	D8S516
0.0751962	5.94E-18	62	7.90E-20	876	0.0131279	0.0122601	3.16579	1	6	D8S516
0.761509	0.74155	62	0.00806452	876	0.0108447	0.010661	0.092112	1	-4	D8S516
0.371238	1.19618	57	0.403509	663	0.361237	0.364583	0.799518	1	8	D8S520
0.402548	0.813844	57	0.184211	663	0.217195	0.214583	0.7007	1	8	D8S520
0.027895	4.30E-13	57	9.62E-15	663	0.0218703	0.0201389	4.83455	1	10	D8S520
0.62836	1.15818	57	0.122807	663	0.107843	0.109028	0.234292	1	0	D8S520
0.577855	0.791186	57	0.0526315	663	0.0656109	0.0645833	0.309715	1	-10	D8S520
0.353393	0.726123	57	0.0789474	663	0.105581	0.103472	0.861236	1	2	D8S520
0.0777413	1.65417	57	0.157895	663	0.10181	0.10625	3.1115	1	4	D8S520
0.222305	1.57E-11	57	1.07E-13	663	0.00678733	0.006625	1.48943	1	-12	D8S520
0.684583	2.16E-11	57	1.63E-14	663	0.000754148	0.000694444	0.165012	1	9	D8S520
0.142149	5.08E-11	57	5.03E-13	663	0.00980392	0.00902778	2.15454	1	-2	D8S520
0.565574	2.82E-12	57	4.26E-15	663	0.0015083	0.00138889	0.330144	1	12	D8S520
0.267119	0.808015	58	0.474138	840	0.527381	0.523942	1.23148	1	0	D8S542
0.0842544	1.53528	58	0.206897	840	0.145238	0.14922	2.98086	1	4	D8S542
0.893055	0.972736	58	0.318965	840	0.325	0.32461	0.018074	1	2	D8S542
0.526596	5.83E-11	58	1.04E-13	840	0.00178571	0.00167038	0.400955	1	-2	D8S542
0.714754	5.94E-12	58	3.54E-15	840	0.000595238	0.000556793	0.133575	1	-12	D8S542
0.930316	1.03056	55	0.0909091	814	0.0884521	0.0886076	0.0076471	1	-8	D8S550
0.993832	1.00236	55	0.118182	814	0.117936	0.117952	5.98E-05	1	12	D8S550
0.77785	0.894133	55	0.0636364	814	0.0706388	0.0701956	0.0795925	1	-6	D8S550
0.707978	0.920186	55	0.263636	814	0.280098	0.279056	0.140305	1	14	D8S550
0.305257	0.733118	55	0.109091	814	0.14312	0.140967	1.05109	1	-2	D8S550
0.076296	2.41396	55	0.0545453	814	0.0233415	0.0253165	3.14209	1	8	D8S550
0.719432	1.14932	55	0.0727273	814	0.0638821	0.0644419	0.129038	1	10	D8S550
0.204892	1.74582	55	0.0636362	814	0.0374693	0.0391254	1.60716	1	18	D8S550
0.900611	1.09808	55	0.0181818	814	0.0165848	0.0166858	0.0155975	1	20	D8S550
0.384808	0.716726	55	0.0636364	814	0.0866093	0.0851554	0.755287	1	16	D8S550
0.412013	1.36158	55	0.0818181	814	0.0614251	0.0627158	0.672983	1	0	D8S550
0.277346	3.77E-11	55	2.09E-13	814	0.00552826	0.00517837	1.18005	1	2	D8S550
0.469274	1.17E-12	55	2.89E-16	814	0.002457	0.0023015	0.523685	1	22	D8S550
0.608964	2.02E-13	55	2.48E-16	814	0.0012285	0.00115075	0.261687	1	6	D8S550
0.608964	2.02E-13	55	2.48E-16	814	0.0012285	0.00115075	0.261687	1	4	D8S550
0.131551	0.579512	16	0.46875	391	0.603581	0.59828	2.2741	1	1	DG00AAHBG
0.131551	1.72559	16	0.53125	391	0.396419	0.40172	2.2741	1	2	DG00AAHBG
0.285177	0.773002	41	0.646341	725	0.702759	0.699739	1.14225	1	2	DG00AAHBH

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FIG. 7E. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.285177	1.29366	41	0.353659	725	0.297241	0.300261	1.14225	1	1	DG00AAHBH
0.382271	0.806631	38	0.631579	811	0.680025	0.677858	0.763387	1	3	DG00AAHBI
0.382271	1.23972	38	0.368421	811	0.319975	0.322144	0.763387	1	1	DG00AAHBI
0.278007	1.3071	52	0.240385	531	0.194815	0.198971	1.17681	1	0	DG8S117
0.278007	0.765052	52	0.759615	531	0.805085	0.801029	1.17681	1	9	DG8S117
0.971671	0.988415	62	0.91129	826	0.912228	0.912162	0.00126118	1	0	DG8S118
0.971671	1.01172	62	0.0887096	826	0.0877724	0.0878378	0.00126118	1	5	DG8S118
0.335458	0.818662	52	0.394231	604	0.442881	0.439024	0.927712	1	0	DG8S127
0.888013	0.956222	52	0.115385	604	0.120033	0.119665	0.01983	1	6	DG8S127
0.258737	1.26033	52	0.490384	604	0.432947	0.4375	1.2755	1	1	DG8S127
0.362993	1.54E-12	52	6.38E-15	604	0.00413907	0.00381098	0.827511	1	2	DG8S127
0.847624	1.04506	56	0.758929	646	0.750774	0.751425	0.0369218	1	0	DG8S128
0.847624	0.956886	56	0.241071	646	0.249226	0.248575	0.0369218	1	4	DG8S128
0.893296	0.973154	56	0.366072	772	0.372409	0.371981	0.0179922	1	4	DG8S130
0.256885	0.800914	56	0.482143	772	0.537565	0.533816	1.28547	1	0	DG8S130
0.540972	1.63315	56	0.0178571	772	0.0110104	0.0114734	0.373742	1	-4	DG8S130
0.173265	6.94598	56	0.0089286	772	0.00129533	0.00181159	1.85446	1	12	DG8S130
0.169927	1.8395	56	0.0625	772	0.0349741	0.0368357	1.88359	1	-16	DG8S130
0.208801	1.73918	56	0.0624999	772	0.0369171	0.0386473	1.57972	1	8	DG8S130
0.358847	7.02E-11	56	2.74E-13	772	0.00388601	0.00362319	0.841924	1	-12	DG8S130
0.516655	1.44E-10	56	2.80E-13	772	0.00194301	0.00181159	0.420566	1	-8	DG8S130
0.84086	0.980424	60	0.85	739	0.852503	0.852315	0.00550408	1	0	DG8S134
0.877445	0.959107	60	0.141667	739	0.14682	0.148433	0.0237803	1	4	DG8S134
0.109039	12.4118	60	0.00833336	739	0.000676588	0.00125156	2.5681	1	2	DG8S134
1	1	57	0.657895	779	0.657895	0.657895	-9.09E-13	1	0	DG8S136
0.112226	0.373997	57	0.017544	779	0.0455712	0.0436603	2.52259	1	6	DG8S136
0.648818	1.1734	57	0.0877193	779	0.0757381	0.076555	0.207393	1	-6	DG8S136
0.605035	1.24131	57	0.0614035	779	0.0500642	0.0508373	0.267469	1	2	DG8S136
0.113172	0.4357	57	0.0263158	779	0.0584082	0.0562201	2.50935	1	4	DG8S136
0.359938	1.41477	57	0.0789473	779	0.0571245	0.0586124	0.838111	1	-4	DG8S136
0.812303	0.868891	57	0.0263158	779	0.0301669	0.0299043	0.0563853	1	-2	DG8S136
0.707013	8.09E-11	57	5.20E-14	779	0.000641848	0.000598086	0.141279	1	-10	DG8S136
0.243919	1.98701	57	0.0350877	779	0.0179718	0.0191388	1.3578	1	8	DG8S136
0.400351	7.17E-13	57	2.31E-15	779	0.00320924	0.00299043	0.707272	1	-8	DG8S136
0.594973	6.71E-12	57	8.62E-15	779	0.0012837	0.00119617	0.282645	1	10	DG8S136
0.253998	4.58704	57	0.00877195	779	0.00192554	0.00239234	1.30118	1	-14	DG8S136
0.604575	0.779604	11	0.272727	234	0.324786	0.322449	0.268151	1	-2	DG8S137
0.33397	1.95338	11	0.136363	234	0.0747863	0.077551	0.933443	1	2	DG8S137
0.291975	1.90022	11	0.181818	234	0.104701	0.108163	1.11049	1	6	DG8S137
0.90172	0.880952	11	0.0454546	234	0.0512821	0.0510204	0.0152496	1	10	DG8S137
0.631526	0.768256	11	0.181819	234	0.224359	0.222449	0.229998	1	0	DG8S137
0.960863	0.963635	11	0.090909	234	0.0940171	0.0938776	0.00240792	1	-4	DG8S137
0.398795	0.458876	11	0.0454547	234	0.0940171	0.0918367	0.711955	1	4	DG8S137
0.409548	2.73812	11	0.045455	234	0.017094	0.0183673	0.680111	1	12	DG8S137
0.543528	7.21E-11	11	6.21E-13	234	0.00854701	0.00816327	0.36904	1	8	DG8S137
0.761687	2.17E-10	11	4.64E-13	234	0.00213675	0.00204082	0.0919703	1	14	DG8S137
0.667845	3.71E-10	11	1.59E-12	234	0.00427351	0.00408163	0.184133	1	18	DG8S137
0.366532	0.7517	55	0.0999999	761	0.128778	0.126838	0.815387	1	-1	DG8S138
0.356408	1.33812	55	0.9	761	0.870565	0.872549	0.850512	1	0	DG8S138
0.708673	1.75E-12	55	1.15E-15	761	0.00085703	0.000812745	0.139606	1	1	DG8S138
0.887346	1.03081	49	0.408163	585	0.400855	0.40142	0.0200685	1	0	DG8S147
0.900469	0.973571	49	0.591837	585	0.598291	0.597792	0.0156423	1	2	DG8S147
0.688292	4.37E-11	49	3.73E-14	585	0.000854701	0.000788644	0.16094	1	1	DG8S147
0.636615	0.830118	59	0.0593221	694	0.0706052	0.0697211	0.223186	1	-4	DG8S148
0.545287	1.13556	59	0.305085	694	0.278818	0.280876	0.365829	1	2	DG8S148
0.245471	0.761006	59	0.194915	694	0.241354	0.237716	1.34889	1	-2	DG8S148
0.633681	1.09821	59	0.398305	694	0.376081	0.377822	0.227103	1	0	DG8S148
0.89712	1.07176	59	0.0338982	694	0.0317003	0.0318725	0.0167185	1	4	DG8S148



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FIG. 7F. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.0239166	109517	59	0.00847366	694	7.80E-08	0.000664011	5.10087	1	6	DG8S148
0.567669	1.72E-10	59	2.48E-13	694	0.00144092	0.00132802	0.326599	1	-17	DG8S148
0.263405	1.34158	31	0.5	473	0.427061	0.431548	1.25077	1	-2	DG8S153
0.857201	0.928867	31	0.112903	473	0.120507	0.12004	0.0323776	1	0	DG8S153
0.165944	1.45E-15	31	2.34E-17	473	0.0158562	0.014881	1.91921	1	-6	DG8S153
0.332639	0.666577	31	0.0967743	473	0.138478	0.135913	0.938597	1	8	DG8S153
0.960209	1.01975	31	0.129032	473	0.12685	0.126984	0.00248915	1	6	DG8S153
0.743331	0.823731	31	0.0483872	473	0.0581395	0.0575397	0.10722	1	10	DG8S153
0.99324	0.994838	31	0.0483869	473	0.0486258	0.0486111	7.18E-05	1	2	DG8S153
0.0729489	4.56E-12	31	1.24E-13	473	0.0264271	0.0248016	3.21539	1	14	DG8S153
0.410177	1.7307	31	0.0483871	473	0.0285412	0.0297619	0.678286	1	4	DG8S153
0.425003	1.20E-11	31	6.38E-14	473	0.00528541	0.00496032	0.63644	1	12	DG8S153
0.296624	3.86065	31	0.016129	473	0.00422833	0.00496032	1.08931	1	-4	DG8S153
0.735263	1.10639	27	0.333334	453	0.311258	0.3125	0.114334	1	4	DG8S155
0.488737	1.35035	27	0.12963	453	0.0993378	0.101042	0.479305	1	8	DG8S155
0.742857	0.724364	27	0.0185185	453	0.0253863	0.025	0.107632	1	14	DG8S155
0.975996	0.985593	27	0.0925924	453	0.093819	0.09375	0.000905323	1	2	DG8S155
0.304698	0.700246	27	0.185185	453	0.245033	0.241667	1.05352	1	6	DG8S155
0.684405	0.787116	27	0.0555556	453	0.0695364	0.06875	0.16521	1	10	DG8S155
0.823623	1.10598	27	0.111111	453	0.101545	0.102083	0.0496789	1	0	DG8S155
0.799212	0.832691	27	0.037037	453	0.0441501	0.04375	0.0647029	1	12	DG8S155
0.555291	3.06E-11	27	1.02E-13	453	0.00331126	0.003125	0.347924	1	-10	DG8S155
0.0775904	17.0753	27	0.0185184	453	0.00110376	0.00208333	3.11467	1	-16	DG8S155
0.73358	5.32E-10	27	5.87E-13	453	0.00110375	0.00104167	0.11585	1	-2	DG8S155
0.0775904	17.0753	27	0.0185184	453	0.00110376	0.00208333	3.11467	1	-12	DG8S155
0.555291	3.06E-11	27	1.02E-13	453	0.00331126	0.003125	0.347924	1	16	DG8S155
0.190234	1.29628	56	0.446429	777	0.383526	0.387755	1.7158	1	6	DG8S156
0.161363	0.75991	56	0.5	777	0.568211	0.563625	1.9614	1	0	DG8S156
0.810832	1.13757	56	0.0357143	777	0.0315315	0.0318127	0.0572896	1	-6	DG8S156
0.249986	4.65763	56	0.00892853	777	0.0019305	0.00240096	1.32338	1	3	DG8S156
0.58993	0.599689	56	0.0089286	777	0.0148005	0.0144058	0.290454	1	9	DG8S156
0.271315	0.652005	51	0.911765	556	0.940648	0.938221	1.21009	1	0	DG8S159
0.373416	1.47229	51	0.0686274	556	0.0476619	0.0494234	0.792264	1	-2	DG8S159
0.519798	1.69077	51	0.0196079	556	0.0116908	0.0123558	0.414294	1	2	DG8S159
0.833341	0.959682	58	0.413793	735	0.42381	0.423077	0.0442757	1	0	DG8S161
0.833341	1.04201	58	0.586207	735	0.57619	0.576923	0.0442757	1	2	DG8S161
0.904333	1.02303	60	0.475	815	0.469325	0.469714	0.0144454	1	0	DG8S163
0.904333	0.977488	60	0.525	815	0.530675	0.530286	0.0144454	1	3	DG8S163
0.368949	1.21796	48	0.375	759	0.33004	0.332714	0.807201	1	0	DG8S170
0.473152	0.8554	48	0.614583	759	0.650856	0.648699	0.514605	1	2	DG8S170
0.695445	0.684212	48	0.0104167	759	0.0151515	0.0148699	0.153254	1	-4	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.00131752	0.00123916	0.245444	1	-19	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.00131752	0.00123916	0.245444	1	-2	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.00131752	0.00123916	0.245444	1	-8	DG8S170
0.114214	0.728131	57	0.359649	643	0.435459	0.429286	2.49492	1	14	DG8S177
0.909639	1.1292	57	0.00877188	643	0.00777605	0.00785714	0.0128809	1	20	DG8S177
0.387023	1.49758	57	0.0526315	643	0.0357698	0.0371429	0.748274	1	10	DG8S177
0.314179	1.2498	57	0.280702	643	0.237947	0.241429	1.01303	1	12	DG8S177
0.567176	0.817801	57	0.0789475	643	0.0948678	0.0935714	0.32743	1	18	DG8S177
0.662838	1.13278	57	0.140351	643	0.125972	0.127143	0.190095	1	16	DG8S177
0.559832	2.02E-10	57	3.16E-13	643	0.00155521	0.00142857	0.339998	1	2	DG8S177
0.453995	1.32747	57	0.0789473	643	0.0606532	0.0621429	0.560659	1	0	DG8S177
0.660657	1.09408	52	0.548077	622	0.525723	0.527448	0.192727	1	0	DG8S179
0.660657	0.914005	52	0.451923	622	0.474277	0.472552	0.192727	1	7	DG8S179
0.28668	0.784423	57	0.22807	625	0.2736	0.269795	1.13515	1	10	DG8S181
0.5118	0.861652	57	0.236842	625	0.2648	0.262463	0.430386	1	12	DG8S181
0.585288	1.19538	57	0.105263	625	0.0896	0.0909091	0.297763	1	0	DG8S181
0.249849	1.52807	57	0.0877193	625	0.0592	0.0615836	1.32415	1	14	DG8S181



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FIG. 7G. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.099905	0.561959	57	0.0701756	625	0.1184	0.11437	2.70706	1	4	DG8S181
0.170625	1.43453	57	0.18421	625	0.136	0.140029	1.87745	1	8	DG8S181
0.877448	0.911411	57	0.0263158	625	0.0288	0.0285924	0.0237791	1	18	DG8S181
0.268346	4.65E-12	57	2.62E-14	625	0.0056	0.00513196	1.22518	1	6	DG8S181
0.139686	2.48889	57	0.0350877	625	0.0144	0.016129	2.18142	1	16	DG8S181
0.0827705	5.56247	57	0.0175438	625	0.00320001	0.00439883	3.00964	1	-2	DG8S181
0.774579	1.3739	57	0.00877194	625	0.0064	0.00659824	0.0820192	1	2	DG8S181
0.154481	0.604252	44	0.875	818	0.920538	0.918213	2.02743	1	0	DG8S182
0.154481	1.65495	44	0.125	818	0.0794621	0.0817865	2.02743	1	-3	DG8S182
0.918548	1.02608	47	0.765957	641	0.76131	0.761628	0.0104576	1	0	DG8S188
0.918548	0.974583	47	0.234043	641	0.23869	0.238372	0.0104576	1	-1	DG8S188
0.500557	1.17799	37	0.594595	568	0.554577	0.557025	0.453756	1	0	DG8S192
0.330595	1.3395	37	0.216216	568	0.170775	0.173554	0.948565	1	2	DG8S192
0.0585889	2.08E-12	37	5.25E-14	568	0.0246479	0.0231405	3.57689	1	16	DG8S192
0.678379	0.808381	37	0.0540541	568	0.0660211	0.0652893	0.171956	1	4	DG8S192
0.59723	0.798803	37	0.0810811	568	0.0994718	0.0983471	0.279193	1	-2	DG8S192
0.523483	0.724957	37	0.0540541	568	0.0730634	0.0719008	0.407025	1	12	DG8S192
0.426469	5.26E-12	37	2.33E-14	568	0.00440141	0.00413223	0.63242	1	8	DG8S192
0.476998	3.49E-10	37	1.23E-12	568	0.00352113	0.00330579	0.50572	1	10	DG8S192
0.61522	2.80E-12	37	4.94E-15	568	0.00176056	0.00165289	0.252644	1	-4	DG8S192
0.61522	2.80E-12	37	4.94E-15	568	0.00176056	0.00165289	0.252644	1	14	DG8S192
0.546339	0.890507	62	0.604839	730	0.632192	0.630051	0.363916	1	0	DG8S197
0.546339	1.12296	62	0.395161	730	0.367808	0.369949	0.363916	1	0	DG8S197
0.238022	1.253	60	0.558333	677	0.502216	0.506784	1.39227	1	0	DG8S201
0.978142	0.994481	60	0.333333	677	0.334564	0.334464	0.000750696	1	4	DG8S201
0.192591	0.666736	60	0.0916667	677	0.131462	0.128223	1.69769	1	-2	DG8S201
0.317853	0.516752	60	0.0166667	677	0.0317578	0.0305292	0.99776	1	2	DG8S201
0.73154	1.17216	62	0.959677	735	0.953061	0.953576	0.117702	1	0	DG8S212
0.73154	0.853125	62	0.0403226	735	0.0469388	0.0464241	0.117702	1	2	DG8S212
0.58951	0.870115	35	0.614286	392	0.646684	0.644028	0.291109	1	4	DG8S215
0.560161	1.1622	35	0.385714	392	0.350765	0.35363	0.339425	1	0	DG8S215
0.558385	1.05E-12	35	2.68E-15	392	0.00255102	0.00234192	0.342508	1	2	DG8S215
0.0871529	1.4521	51	0.45098	292	0.361301	0.374636	2.92619	1	0	DG8S221
0.31001	1.26739	51	0.323529	292	0.273973	0.281341	1.03063	1	5	DG8S221
0.278737	0.540566	51	0.0294117	292	0.0630822	0.0495627	1.17324	1	7	DG8S221
0.295148	0.688172	51	0.0882353	292	0.123288	0.118076	1.09599	1	4	DG8S221
0.0270241	0.474096	51	0.0882353	292	0.169521	0.157434	4.88927	1	-2	DG8S221
0.740381	0.712872	51	0.00980394	292	0.0136986	0.0131195	0.109792	1	1	DG8S221
0.570284	1.42E-14	51	2.44E-17	292	0.00171233	0.00145773	0.322208	1	8	DG8S221
0.423644	2.88119	51	0.00980392	292	0.00342465	0.00437318	0.640186	1	-1	DG8S221
0.288824	1.2375	58	0.37931	726	0.330579	0.334184	1.1251	1	0	DG8S232
0.816519	0.954799	58	0.37069	726	0.381543	0.38074	0.0538355	1	2	DG8S232
0.310151	0.742327	58	0.112069	726	0.145317	0.142857	1.03003	1	-8	DG8S232
0.867702	0.942197	58	0.0775862	726	0.0819559	0.0816327	0.0277481	1	-4	DG8S232
0.207478	0.445616	58	0.0172415	726	0.0378788	0.036352	1.58894	1	4	DG8S232
0.126512	2.29086	58	0.0431034	726	0.0192837	0.0210459	2.33479	1	-2	DG8S232
0.694959	1.33E-12	58	9.19E-16	726	0.000688705	0.000637755	0.153769	1	-6	DG8S232
0.432654	3.68E-15	58	1.02E-17	726	0.00275482	0.00255102	0.615689	1	6	DG8S232
0.0894128	1.94577	62	0.951613	672	0.90997	0.913488	2.88491	1	0	DG8S238
0.0894128	0.513937	62	0.0483871	672	0.0800298	0.0865123	2.88491	1	-8	DG8S238
0.274709	0.76358	37	0.581081	476	0.644958	0.640351	1.19308	1	4	DG8S242
0.274709	1.30962	37	0.418919	476	0.355042	0.359649	1.19308	1	0	DG8S242
0.0454729	2.18298	59	0.949153	468	0.895299	0.901328	4.00101	1	0	DG8S245
0.657445	0.826128	59	0.0508475	468	0.0608974	0.0597723	0.196643	1	-4	DG8S245
0.00211384	4.43E-13	59	1.93E-14	468	0.0416667	0.0370019	9.44796	1	4	DG8S245
0.49051	2.61E-14	59	5.60E-17	468	0.00213675	0.00189753	0.475408	1	-8	DG8S245
0.53694	0.881381	52	0.538461	682	0.569648	0.567439	0.381241	1	0	DG8S249
0.446947	1.21329	52	0.211539	682	0.181085	0.183243	0.578382	1	-19	DG8S249

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FIG. 7H. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.545259	0.566061	52	0.00961538	682	0.0168622	0.0163488	0.36588	1	-17	DG8S249
0.618479	0.6209	52	0.00961543	682	0.0163959	0.0149864	0.248011	1	-21	DG8S249
0.693429	0.869599	52	0.0865384	682	0.0982405	0.0974114	0.155398	1	-2	DG8S249
0.348212	2.20916	52	0.0192308	682	0.00879765	0.00953678	0.879961	1	6	DG8S249
0.144024	1.84322	52	0.0769229	682	0.0432551	0.0456403	2.13443	1	2	DG8S249
0.0648878	3.14E-12	52	5.38E-14	682	0.0168622	0.0156676	3.40783	1	-6	DG8S249
0.11288	1.22E-11	52	1.54E-13	682	0.0124633	0.0115804	2.51343	1	4	DG8S249
0.309862	3.95E-12	52	2.04E-14	682	0.00513196	0.00476839	1.03126	1	-1	DG8S249
0.413523	1.51515	52	0.0480769	682	0.0322581	0.0333787	0.668649	1	-4	DG8S249
0.19623	1.62032	61	0.0819673	584	0.052226	0.0550388	1.67021	1	-10	DG8S250
0.574063	0.880554	61	0.221311	584	0.244007	0.24186	0.315932	1	-4	DG8S250
0.296023	1.32061	61	0.163934	584	0.129281	0.132558	1.09203	1	2	DG8S250
0.412748	1.2111	61	0.221311	584	0.190068	0.193023	0.670878	1	4	DG8S250
0.0459515	0.620924	61	0.172131	584	0.250856	0.243411	3.98337	1	0	DG8S250
0.689122	1.16071	61	0.0737705	584	0.0842123	0.0651163	0.160038	1	-2	DG8S250
0.138411	2.45E-13	61	2.33E-15	584	0.00941781	0.00852713	2.19554	1	8	DG8S250
0.178086	2.65164	61	0.0245902	584	0.00941781	0.0108527	1.81352	1	-8	DG8S250
0.796756	0.829713	61	0.0163935	584	0.0198918	0.0193798	0.0663309	1	6	DG8S250
0.64033	0.635261	61	0.00819671	584	0.0128425	0.0124031	0.218311	1	-12	DG8S250
0.874558	1.12843	61	0.0163934	584	0.0145548	0.0147287	0.0249236	1	-6	DG8S250
0.372264	3.74E-12	61	1.28E-14	584	0.00342466	0.00310078	0.796093	1	12	DG8S250
0.725989	1.07153	61	0.647541	680	0.631618	0.632928	0.122826	1	0	DG8S257
0.819751	0.954377	61	0.303279	680	0.313235	0.312416	0.0519225	1	-2	DG8S257
0.270525	0.546218	61	0.0245901	680	0.0441177	0.0425101	1.21408	1	-6	DG8S257
0.558965	1.6024	61	0.0163936	680	0.0102941	0.0107962	0.341499	1	2	DG8S257
0.121356	11.2314	61	0.00819671	680	0.000735295	0.00134953	2.39973	1	-9	DG8S257
0.639807	1.12067	55	0.218182	637	0.199372	0.200867	0.218995	1	15	DG8S258
0.319529	1.22222	55	0.6	637	0.55102	0.554913	0.990872	1	18	DG8S258
0.076313	0.624114	55	0.145455	637	0.214286	0.208815	3.14173	1	12	DG8S258
0.102499	1.10E-11	55	1.40E-13	637	0.0125589	0.0115607	2.66622	1	0	DG8S258
0.564768	3.16E-15	55	4.98E-18	637	0.00156986	0.00144509	0.331515	1	33	DG8S258
0.564768	3.16E-15	55	4.98E-18	637	0.00156986	0.00144509	0.331515	1	24	DG8S258
0.601723	1.40074	55	0.0272727	637	0.0196232	0.0202312	0.272405	1	21	DG8S258
0.0243049	143973	55	0.00909017	637	6.37E-08	0.000722543	5.07274	1	11	DG8S258
0.421668	0.8133	37	0.662162	549	0.706739	0.703925	0.645661	1	2	DG8S261
0.421668	1.22956	37	0.337838	549	0.29326	0.296075	0.645661	1	0	DG8S261
0.685216	0.75139	37	0.0270271	561	0.0356506	0.0351171	0.164313	1	-4	DG8S262
0.790829	0.93827	37	0.513513	561	0.529412	0.528428	0.0703492	1	0	DG8S262
0.832714	1.09169	37	0.0945949	561	0.087344	0.0877926	0.0446145	1	-10	DG8S262
0.646493	1.13866	37	0.243243	561	0.220143	0.221572	0.21035	1	2	DG8S262
0.65731	0.732383	37	0.027027	561	0.0365419	0.0359532	0.196808	1	-2	DG8S262
0.835834	1.10586	37	0.0675677	561	0.0614973	0.0618729	0.0429424	1	4	DG8S262
0.509432	1.70371	37	0.0270271	561	0.0160428	0.0167224	0.435233	1	6	DG8S262
0.474342	5.07E-11	37	1.81E-13	561	0.00356508	0.00334448	0.511843	1	8	DG8S262
0.234749	2.33E-11	37	2.30E-13	561	0.00980392	0.00919732	1.41185	1	-14	DG8S262
0.320699	1.25582	60	0.233333	751	0.195073	0.197904	0.986093	1	15	DG8S265
0.855426	0.965833	60	0.55	751	0.558589	0.557953	0.0331966	1	18	DG8S265
0.0864804	6.77E-12	60	8.67E-14	751	0.0126498	0.0117139	2.9387	1	0	DG8S265
0.48687	0.845934	60	0.183333	751	0.20972	0.207768	0.483436	1	12	DG8S265
0.579128	3.48E-12	60	4.64E-15	751	0.00133156	0.00123305	0.307647	1	33	DG8S265
0.600177	1.40076	60	0.025	751	0.017976	0.0184957	0.274729	1	21	DG8S265
0.612115	1.79472	60	0.00833334	751	0.00466045	0.00493218	0.257106	1	-6	DG8S265
0.758941	0.938379	51	0.441177	615	0.456911	0.455708	0.0941703	1	-2	DG8S266
0.375468	1.20102	51	0.480392	615	0.434959	0.438438	0.785488	1	0	DG8S266
0.330063	0.701968	51	0.0784314	615	0.10813	0.105856	0.948651	1	-4	DG8S266
0.862197	0.966728	60	0.383333	741	0.391363	0.390762	0.0301294	1	-4	DG8S269
0.509776	0.881533	60	0.55	741	0.580972	0.578652	0.434526	1	0	DG8S269
0.0357162	2.51045	60	0.0666665	741	0.0276653	0.0305868	4.41061	1	-5	DG8S269

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FIG. 7I. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.173805	0.672634	33	0.227273	567	0.304233	0.3	1.84982	1	-2	DG8S271
0.217974	1.38912	33	0.681818	567	0.606702	0.610833	1.51766	1	0	DG8S271
0.430147	0.674487	33	0.0606061	567	0.0873016	0.0858333	0.622426	1	2	DG8S271
0.0118431	17.6876	33	0.0303031	567	0.00176367	0.00333333	6.3342	1	4	DG8S271
0.912134	0.89298	58	0.00862072	674	0.00984391	0.00956284	0.0121764	1	-6	DG8S277
0.94707	1.01449	58	0.275862	674	0.272997	0.273224	0.00440712	1	10	DG8S277
0.0560169	1.47874	58	0.37069	674	0.284866	0.291687	3.65156	1	0	DG8S277
0.730644	1.12844	58	0.0862067	674	0.0771513	0.0778689	0.118521	1	2	DG8S277
0.0751519	0.647866	58	0.172414	674	0.243323	0.237705	3.16675	1	-2	DG8S277
0.289543	0.597743	58	0.0344827	674	0.0563798	0.0546448	1.12175	1	8	DG8S277
0.940706	1.05742	58	0.0172414	674	0.0163205	0.0163934	0.00553268	1	4	DG8S277
0.363148	4.45E-11	58	1.66E-13	674	0.0037092	0.0034153	0.826977	1	14	DG8S277
0.254078	2.21016	58	0.0258619	674	0.0118694	0.0129781	1.30074	1	6	DG8S277
0.45351	0.500945	58	0.0086207	674	0.0170623	0.0163934	0.561863	1	12	DG8S277
0.22211	1.36E-13	58	9.13E-16	674	0.00667656	0.00614754	1.49069	1	-4	DG8S277
0.504084	1.15686	48	0.625	576	0.590278	0.592949	0.446328	1	0	DG8S285
0.395359	0.820477	48	0.28125	576	0.322917	0.319712	0.722397	1	2	DG8S285
0.684895	1.18625	48	0.0833334	576	0.0711805	0.0721154	0.187632	1	1	DG8S285
0.6726	0.683154	48	0.0104166	576	0.015625	0.0152244	0.178576	1	-1	DG8S285
0.356563	0.835858	61	0.565574	500	0.609	0.604278	0.849961	1	0	DG8S291
0.91169	0.975087	61	0.229508	500	0.234	0.233512	0.0123005	1	4	DG8S291
0.0162732	1.91592	61	0.180328	500	0.103	0.111408	5.77312	1	2	DG8S291
0.104377	0.36212	61	0.0163934	500	0.044	0.0409982	2.63735	1	-2	DG8S291
0.844816	0.818186	61	0.00819676	500	0.01	0.00980392	0.038313	1	6	DG8S291
0.83931	0.953758	47	0.702128	729	0.711934	0.711134	0.0411182	1	2	DG8S292
0.83931	1.04849	47	0.297872	729	0.288066	0.28866	0.0411182	1	0	DG8S292
0.403875	0.81926	54	0.212963	727	0.248281	0.245839	0.696758	1	12	DG8S297
0.167267	1.32613	54	0.416667	727	0.350069	0.354673	1.90727	1	0	DG8S297
0.203843	0.504031	54	0.0277779	727	0.0536451	0.0518566	1.61463	1	14	DG8S297
0.584603	0.836642	54	0.111111	727	0.129986	0.128681	0.331796	1	4	DG8S297
0.530464	0.650253	54	0.0185185	727	0.0281981	0.0275288	0.393502	1	10	DG8S297
0.43227	1.25473	54	0.148148	727	0.121733	0.12356	0.616716	1	16	DG8S297
0.0683897	1.50E-11	54	2.41E-13	727	0.0158184	0.0147247	3.32125	1	8	DG8S297
0.561417	1.4551	54	0.0277778	727	0.0192572	0.0198464	0.337257	1	18	DG8S297
0.0491363	4.5873	54	0.0277778	727	0.00618982	0.00768246	3.87069	1	-4	DG8S297
0.389089	0.459234	54	0.00925929	727	0.019945	0.0192061	0.741788	1	6	DG8S297
0.704978	2.41E-11	54	1.66E-14	727	0.000687757	0.000640205	0.143345	1	2	DG8S297
0.255396	2.69E-11	54	1.68E-13	727	0.00618982	0.00576184	1.29354	1	-2	DG8S297
0.501664	0.852277	60	0.791667	726	0.816804	0.814885	0.451414	1	0	DG8S298
0.48337	1.18478	60	0.2	726	0.174242	0.176209	0.49125	1	2	DG8S298
0.94407	0.930186	60	0.00833332	726	0.00895317	0.00890585	0.0049217	1	1	DG8S298
0.446864	1.21504	60	0.841667	602	0.813953	0.816465	0.578595	1	0	DG8S301
0.446864	0.82302	60	0.158333	602	0.186047	0.183535	0.578595	1	1	DG8S301
0.756783	0.938942	59	0.330508	666	0.344595	0.343448	0.0959195	1	26	DG8S302
0.798986	1.05355	59	0.330509	666	0.319069	0.32	0.0648514	1	28	DG8S302
0.676336	0.881765	59	0.110169	666	0.123123	0.122069	0.17428	1	24	DG8S302
0.354682	1.42403	59	0.0762711	666	0.0548048	0.0565517	0.856634	1	30	DG8S302
0.866434	0.956303	59	0.152542	666	0.158408	0.157931	0.0282879	1	0	DG8S302
0.716308	1.09245	50	0.77	756	0.753968	0.754963	0.132057	1	2	DG8S303
0.511442	2.1717	50	0.00999994	756	0.00462963	0.00496278	0.431115	1	4	DG8S303
0.634817	0.889546	50	0.22	756	0.240741	0.239454	0.225585	1	-2	DG8S303
0.720383	2.14E-12	50	1.42E-15	756	0.000661376	0.000620347	0.128126	1	0	DG8S303
0.527856	0.825112	27	0.666667	315	0.707936	0.704678	0.398517	1	4	DG8S307
0.403115	1.35581	27	0.203704	315	0.15873	0.162281	0.699016	1	0	DG8S307
0.631224	1.36652	27	0.0555557	315	0.0412698	0.0423977	0.230404	1	8	DG8S307
0.649847	0.788966	27	0.0740741	315	0.0920635	0.0906433	0.206094	1	-4	DG8S307
0.230715	0.785129	55	0.572727	689	0.630624	0.626344	1.43645	1	0	DG8S308
0.859933	1.0476	55	0.172727	689	0.168183	0.166667	0.0311381	1	2	DG8S308

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FIG. 7J. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.342117	1.35534	55	0.118182	689	0.0899855	0.0920699	0.902483	1	-14	DG8S308
0.158839	1.68961	55	0.0909091	689	0.0558781	0.0584677	1.98525	1	-4	DG8S308
0.229603	2.04227	55	0.0363637	689	0.0181422	0.0194892	1.44332	1	4	DG8S308
0.20954	0.341997	55	0.00909089	689	0.0261248	0.0248656	1.5746	1	-6	DG8S308
0.09531	1.16E-15	55	1.53E-17	689	0.0130624	0.0120968	2.78232	1	-2	DG8S308
0.233649	2.20E-12	61	1.34E-14	660	0.0060606	0.00554785	1.41851	1	8	DG8S316
0.90597	0.97619	61	0.311475	660	0.316667	0.316227	0.0139532	1	10	DG8S316
0.917848	0.980467	61	0.42623	660	0.431081	0.430652	0.0106387	1	0	DG8S316
0.492863	0.803044	61	0.0901639	660	0.109848	0.108183	0.47027	1	12	DG8S316
0.378811	1.28211	61	0.139344	660	0.112121	0.114424	0.774558	1	14	DG8S316
0.334599	1.75593	61	0.0327868	660	0.0189394	0.020111	0.931016	1	16	DG8S316
0.265328	3.41E-11	61	1.82E-13	660	0.00530303	0.00485437	1.24074	1	2	DG8S316
0.427873	0.807637	31	0.354839	606	0.405116	0.402669	0.628589	1	2	DG8S322
0.637181	1.34977	31	0.048387	606	0.0363036	0.0368917	0.222449	1	10	DG8S322
0.188944	1.4144	31	0.451613	606	0.367987	0.372057	1.72584	1	0	DG8S322
0.145344	0.499649	31	0.0645162	606	0.121287	0.118524	2.12045	1	4	DG8S322
0.738106	1.17794	31	0.0806451	606	0.0693069	0.0698587	0.111799	1	6	DG8S322
0.858146	1.0385	62	0.733871	700	0.726429	0.727034	0.0319461	1	0	DG8S323
0.858146	0.95293	62	0.266129	700	0.273571	0.272966	0.0319461	1	5	DG8S323
0.737494	0.93203	60	0.283333	695	0.297842	0.296689	0.112342	1	0	DG8S324
0.891325	1.08814	60	0.025	695	0.0230216	0.0231788	0.018667	1	10	DG8S324
0.451315	0.836462	60	0.191667	695	0.220863	0.218543	0.567348	1	8	DG8S324
0.610258	1.12657	60	0.216667	695	0.197122	0.198675	0.259799	1	2	DG8S324
0.784209	1.08289	60	0.125	695	0.116547	0.117219	0.0749874	1	6	DG8S324
0.949648	1.01838	60	0.125	695	0.123022	0.123179	0.00398783	1	4	DG8S324
0.433781	1.56322	60	0.0333333	695	0.0215827	0.0225166	0.612678	1	12	DG8S324
0.424208	0.782798	56	0.107143	726	0.13292	0.131074	0.638827	1	-4	DG8S322
0.776646	1.10954	56	0.0803571	726	0.0730028	0.0735294	0.0804817	1	4	DG8S332
0.374309	0.812204	56	0.214286	726	0.251377	0.248721	0.789309	1	2	DG8S332
0.285306	1.26095	56	0.303571	726	0.256887	0.26023	1.14164	1	0	DG8S332
0.605396	0.885167	56	0.214286	726	0.235537	0.234015	0.266934	1	-2	DG8S332
0.504794	1.3969	56	0.0446429	726	0.0323691	0.0332481	0.444843	1	6	DG8S332
0.231896	2.03133	56	0.0357142	726	0.0179063	0.0191816	1.4292	1	-6	DG8S332
0.542218	0.868101	51	0.264706	539	0.293135	0.290678	0.371444	1	-5	DG8S333
0.542218	1.15194	51	0.735294	539	0.706865	0.709322	0.371444	1	0	DG8S333
1	1	0	0.638728	173	0.638728	0.638728	0	1	1	INVSNP
1	1	0	0.361272	173	0.361272	0.361272	0	1	2	INVSNP
0.178207	0.769592	61	0.352459	764	0.414267	0.409697	1.81251	1	1	SG08S100
0.178207	1.29939	61	0.647541	764	0.585733	0.590303	1.81251	1	2	SG08S100
0.0845721	0.706471	58	0.396551	387	0.481912	0.470787	2.97477	1	1	SG08S102
0.0845721	1.41548	58	0.603448	387	0.518088	0.529213	2.97477	1	2	SG08S102
0.637875	0.908047	61	0.647541	390	0.669231	0.666297	0.221532	1	0	SG08S112
0.637875	1.10127	61	0.352459	390	0.330769	0.333703	0.221532	1	2	SG08S112
0.527988	1.12903	60	0.583333	700	0.553571	0.555921	0.398263	1	0	SG08S120
0.527988	0.885714	60	0.416667	700	0.446429	0.444079	0.398263	1	2	SG08S120
0.405963	0.838721	60	0.708333	748	0.743298	0.740695	0.690592	1	0	SG08S138
0.405963	1.19229	60	0.291667	748	0.256702	0.259305	0.690592	1	2	SG08S138
0.64107	0.854262	34	0.82353	391	0.845269	0.843529	0.217346	1	1	SG08S139
0.64107	1.1706	34	0.176471	391	0.154731	0.156471	0.217346	1	0	SG08S139
0.866941	0.968661	61	0.557377	713	0.565217	0.564599	0.0280712	1	0	SG08S15
0.866941	1.03235	61	0.442623	713	0.434783	0.435401	0.0280712	1	2	SG08S15
0.168402	1.29721	61	0.516394	701	0.451498	0.456693	1.89711	1	0	SG08S26
0.168402	0.770884	61	0.483607	701	0.548502	0.543307	1.89711	1	2	SG08S26
0.145968	1.3272	61	0.516393	397	0.445844	0.45524	2.11388	1	2	SG08S27
0.145968	0.753463	61	0.483607	397	0.554156	0.54476	2.11388	1	1	SG08S27
0.223599	0.782321	58	0.560345	397	0.619647	0.612088	1.48112	1	1	SG08S32
0.223599	1.27825	58	0.439655	397	0.380353	0.387912	1.48112	1	0	SG08S32
0.308774	1.22057	61	0.639344	618	0.592233	0.596465	1.03591	1	1	SG08S35

FIG. 7K. Results for Bipolar Disorder without Panic Disorder

p-val	r	#aff	aff.freq	#con	con.freq	H0.freq	X2	info	allele	marker
0.308774	0.819292	61	0.360656	618	0.407767	0.403535	1.03591	1	2	SG08S35
0.518451	0.883656	61	0.467213	523	0.498088	0.494863	0.416973	1	1	SG08S39
0.518451	1.13166	61	0.532787	523	0.501912	0.505137	0.416973	1	0	SG08S39
0.533866	1.12929	59	0.415254	689	0.386067	0.388369	0.387027	1	0	SG08S42
0.533866	0.885511	59	0.584746	689	0.613933	0.611631	0.387027	1	2	SG08S42
0.654111	1.14576	61	0.114754	610	0.101639	0.102832	0.200756	1	1	SG08S46
0.654111	0.872787	61	0.885246	610	0.898361	0.897168	0.200756	1	3	SG08S46
0.189	0.776046	59	0.542373	743	0.604307	0.599751	1.72539	1	0	SG08S5
0.189	1.28858	59	0.457627	743	0.395693	0.400249	1.72539	1	2	SG08S5
0.565554	1.11705	59	0.466102	685	0.438686	0.44086	0.330178	1	2	SG08S50
0.565554	0.895211	59	0.533898	685	0.561314	0.55914	0.330178	1	0	SG08S50
0.069287	0.693897	57	0.456141	381	0.547244	0.535388	3.29983	1	0	SG08S506
0.069287	1.44114	57	0.54388	381	0.452756	0.464612	3.29983	1	2	SG08S506
0.16987	0.75	60	0.3	396	0.363636	0.355263	1.88409	1	2	SG08S507
0.16987	1.33333	60	0.7	396	0.636364	0.644737	1.88409	1	3	SG08S507
0.276852	0.802329	58	0.387931	392	0.441326	0.434444	1.18248	1	1	SG08S508
0.276852	1.24637	58	0.612069	392	0.558674	0.565556	1.18248	1	3	SG08S508
0.463684	1.20429	58	0.818965	371	0.789757	0.793706	0.536987	1	1	SG08S510
0.463684	0.830365	58	0.181035	371	0.210243	0.206294	0.536987	1	0	SG08S510
0.897524	1.02652	58	0.413793	362	0.407459	0.408333	0.0165867	1	1	SG08S511
0.897524	0.974165	58	0.586207	362	0.592541	0.591667	0.0165867	1	3	SG08S511
0.538636	1.1332	57	0.429825	388	0.399484	0.403371	0.378074	1	2	SG08S512
0.538636	0.882455	57	0.570175	388	0.600516	0.596629	0.378074	1	1	SG08S512
0.276978	0.807854	61	0.418032	392	0.470663	0.463576	1.18186	1	1	SG08S517
0.276978	1.23785	61	0.581967	392	0.529337	0.536424	1.18186	1	3	SG08S517
0.246826	1.25791	61	0.614754	397	0.559194	0.566594	1.34118	1	1	SG08S520
0.246826	0.794971	61	0.385246	397	0.440806	0.433406	1.34118	1	0	SG08S520
0.998424	0.999561	59	0.728813	391	0.7289	0.728889	3.90E-06	1	2	SG08S6
0.998424	1.00044	59	0.271187	391	0.2711	0.271111	3.90E-06	1	0	SG08S6
0.200406	0.775536	59	0.440678	380	0.503947	0.495444	1.63941	1	1	SG08S70
0.200406	1.28943	59	0.559322	380	0.496053	0.504556	1.63941	1	3	SG08S70
0.0732312	1.40539	61	0.590164	740	0.506081	0.512484	3.20907	1	0	SG08S71
0.0732312	0.711544	61	0.409836	740	0.493919	0.487516	3.20907	1	2	SG08S71
0.252356	0.7983	60	0.458333	378	0.51455	0.506849	1.31021	1	3	SG08S73
0.252356	1.25266	60	0.541667	378	0.48545	0.493151	1.31021	1	1	SG08S73
0.830216	0.958777	60	0.466667	394	0.477157	0.475771	0.0459779	1	1	SG08S76
0.830216	1.043	60	0.533333	394	0.522843	0.524229	0.0459779	1	2	SG08S76
0.781553	1.0559	60	0.525	394	0.511421	0.513216	0.0768933	1	0	SG08S90
0.781553	0.947063	60	0.475	394	0.488579	0.486784	0.0768933	1	1	SG08S90
0.234935	0.760584	62	0.774194	705	0.81844	0.814863	1.41073	1	1	SG08S93
0.234935	1.31478	62	0.225806	705	0.18156	0.185137	1.41073	1	2	SG08S93
0.402568	0.83199	56	0.294643	362	0.334254	0.328947	0.700643	1	0	SG08S94
0.402568	1.20194	56	0.705357	362	0.665746	0.671053	0.700643	1	2	SG08S94
0.124832	1.34391	60	0.483333	586	0.41041	0.417183	2.35562	1	2	SG08S95
0.124832	0.744099	60	0.516667	586	0.58959	0.582817	2.35562	1	3	SG08S95
0.965393	1.00838	61	0.581967	613	0.579935	0.580119	0.00188245	1	2	SG08S96
0.965393	0.991686	61	0.418033	613	0.420065	0.419881	0.00188245	1	3	SG08S96
0.500983	0.81986	61	0.877049	713	0.896914	0.895349	0.452853	1	0	SG08S97
0.500983	1.21972	61	0.122951	713	0.103086	0.104651	0.452853	1	1	SG08S97

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Chrs Marker	Position in bases according to Build 33
C08 AF287957-1	6609501
C08 DG8S285	6717625
C08 DG8S316	7996504
C08 DG8S201	8078430
C08 DG8S307	8079177
C08 DG8S332	8133961
C08 DG8S322	8166275
C08 DG8S324	8238280
C08 DG8S258	8335265
C08 DG8S265	8335265
C08 DG8S303	8377219
C08 DG8S269	8547384
C08 DG8S232	8602797
C08 DG8S249	8612390
C08 DG8S298	8623920
C08 D8S351	8647934
C08 D8S1825	8795901
C08 SG08S138	8799779
C08 SG08S6	8801073
C08 DG00AAHBI	8889014
C08 D8S1469	8960671
C08 DG00AAHBH	9035511
C08 D8S503	9104198
C08 DG00AAHBG	9132391
C08 DG8S277	9205638
C08 DG8S297	9226230
C08 D8S516	9280975
C08 DG8S177	9315167
C08 DG8S137	9503869
C08 DG8S182	9516392
C08 DG8S262	9560368
C08 DG8S136	9647411
C08 DG8S179	9697364
C08 DG8S134	9774278
C08 SG08S93	9794410
C08 SG08S112	9804270
C08 DG8S138	9815189
C08 SG08S15	9851027
C08 DG8S128	9943010
C08 SG08S100	9961132
C08 SG08S39	9971559
C08 D8S1721	10011582
C08 D8S542	10028442
C08 DG8S302	10062565
C08 DG8S257	10128880
C08 SG08S120	10154461
C08 DG8S266	10161672
C08 DG8S238	10223621
C08 DG8S323	10259523
C08 DG8S155	10297139
C08 DG8S291	10313503
C08 D8S520	10427394
C08 SG08S506	10492671
C08 SG08S42	10574489
C08 SG08S50	10587063

FIG. 8A

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C08 DG8S148	10609020
C08 DG8S271	10624569
C08 DG8S197	10625200
C08 DG8S215	10641313
C08 DG8S159	10704990
C08 DG8S212	10726663
C08 D8S550	10752550
C08 SG08S94	10763565
C08 SG08S95	10810525
C08 SG08S96	10829574
C08 SG08S5	10857894
C08 SG08S102	10865779
C08 AF131215-1	10872575
C08 SG08S507	10881766
C08 SG08S70	10881783
C08 AF131215-2	10885941
C08 SG08S71	10887924
C08 SG08S517	10893214
C08 AF131215-4	10912771
C08 SG08S508	10914173
C08 SG08S73	10914271
C08 DG8S118	10923128
C08 DG8S161	10925492
C08 DG8S127	10926764
C08 SG08S520	10931667
C08 DG8S153	10938731
C08 SG08S510	10990033
C08 DG8S242	11023805
C08 SG08S90	11028406
C08 SG08S32	11048161
C08 DG8S156	11054915
C08 DG8S147	11071336
C08 SG08S511	11077298
C08 SG08S512	11077399
C08 SG08S27	11086652
C08 SG08S26	11090369
C08 D8S265	11150773
C08 D8S1695	11220756
C08 SG08S46	11234300
C08 DG8S130	11239181
C08 SG08S35	11253693
C08 SG08S139	11282021
C08 DG8S170	11287781
C08 DG8S261	11303006
C08 D8S1759	11348674
C08 DG8S117	11350993
C08 AC022239-5	11355629
C08 DG8S181	11390001
C08 SG08S97	11410417
C08 DG8S163	11458431
C08 DG8S221	11473774
C08 SG08S76	11477186
C08 DG8S292	11509365
C08 DG8S333	11607597
C08 D8S1130	11704969
C08 AC068974-2	11824194

FIG. 8B

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C08	AC068974-2	11974598
C08	DG8S250	12427095
C08	AF188029-1	12517357
C08	AF188029-7	12558445
C08	AF188029-10	12572944
C08	AF188029-12	12583159
C08	DG8S301	12612075
C08	DG8S308	12617557
C08	DG8S188	12654843
C08	DG8S245	12665541
C08	DG8S192	12759031

FIG. 8C



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#name	chrom	strand	txStart	txEnd	cdsStart	cdsEnd	exonCou	exonStarts	exonEnds	proteinID	alignID
AF355799	chr8	-	7004812	7007356	7005040	7005887	nt	3 7004812,7006734,7007293,	7006058,7006821,7007356,	Q8TEZ3	19512
NM_004084	chr8	-	7014400	7016826	7014521	7016386	3	7014400,7016211,7016757,	7014831,7016398,7016825,	DEFN_HUMAN	dna68
AF355799	chr8	-	7023915	7026459	7024143	7024990	3	7023915,7024837,7026388,	7024161,7025024,7026459,	Q8TEZ3	19511
BC027917	chr8	-	7033503	7035918	7033624	7034485	3	7033503,7034310,7035858,	7033734,7034497,7035818,	DEFN_HUMAN	3745
NM_005217	chr8	-	7033507	7035929	7033624	7034485	3	7033507,7034310,7035858,	7033734,7034497,7035829,	DEFN_HUMAN	dna68
NM_021010	chr8	-	7072941	7074372	7073085	7074332	2	7072941,7074180,	7073178,7074372,	DEF5_HUMAN	dna69
AK090418	chr8	-	7278254	7283114	7282743	7283114	1	7278254,	7283114,	Q8NF61	17580
AK090418	chr8	-	7285876	7290736	7290365	7290736	1	7285876,	7290736,	Q8NF61	17579
AK090418	chr8	-	7293498	7298358	7297987	7298358	1	7293498,	7298358,	Q8NF61	17582
AK090418	chr8	-	7301120	7305980	7305609	7305980	1	7301120,	7305980,	Q8NF61	17583
AK090418	chr8	-	7308742	7313602	7313231	7313602	1	7308742,	7313602,	Q8NF61	17581
AF301470	chr8	-	7448603	7447983	7448618	7447765	2	7448603,7447707,	7448784,7447983,	D103_HUMAN	3848
AF168616	chr8	-	7468250	7481306	7488513	7481138	4	7468250,7488758,7480341,7481077,	7468535,7488834,7480494,7481305,	SPGB_HUMAN	38437
AJ314834	chr8	-	7487938	7492717	7487990	7492703	2	7487938,7492645,	7488151,7492717,	D104_HUMAN	3649
AJ314834	chr8	+	7565027	7569803	7565041	7569751	2	7565027,7569590,	7565099,7569803,	D104_HUMAN	3650
AF301470	chr8	+	7609760	7611140	7609978	7611125	2	7609760,7610979,	7610036,7611140,	D103_HUMAN	3647
Z71389	chr8	+	7623246	7625268	7623269	7625167	2	7623246,7625030,	7623327,7625268,	BD02_HUMAN	2333
U87595	chr8	+	7629832	7630426	7629832	7630426	1	7629832,	7630426,	O15314	7294
AF217970	chr8	+	7668927	7673420	7669257	7669701	2	7668927,7672655,	7670989,7673420,	Q8HBS9	31542
AL833872	chr8	-	8048292	8056876	8048710	8056876	2	8048292,8056260,	8047853,8056876,	Q8N3N5	13675
BC016047	chr8	+	8431012	8432652	8431012	8431822	1	8431012,	8432652,	Q96B33	21598
BC014226	chr8	-	8514282	8520457	8514568	8520457	3	8514282,8525909,851805,	8514600,8526036,8520457,	Q96C10	22026
AB018816	chr8	-	8514568	8521603	8514568	8521603	3	8514568,8525909,851805,	8514600,8526036,8521603,	Q9Y4C4	37002
AL137679	chr8	+	8731388	8761883	8746898	8758579	8	8731388,8736514,8740086,8744868,8746841,8748894,8758336,8761093,	8731716,8736893,8740297,8744950,8746951,8749009,8758828,8761883,	Q9NSX3	32471
BC035279	chr8	+	8731484	8759524	8731608	8758579	7	8731484,8736514,8740086,8744868,8746841,8748894,8758336,	8731716,8736893,8740297,8744950,8746951,8749009,8759524,	Q8IV48	11048
AK024067	chr8	-	8868640	8879241	8869338	8870196	2	8868640,8879107,	8870213,8879241,	Q9H812	30600
AF082557	chr8	+	9308729	9510891	9308729	9505281	28	9308729,9344128,9408495,9409289,9433207,9434731,9435355,9436915,9438499,9438688,9448918,9455185,9459434,9481823,9483409,9483921,9476568,9480153,9481088,9490080,9491691,9493260,9494238,9494783,9498650,9505194,	9308928,9344222,9408532,9409345,9433302,9434798,9435542,9437037,9438591,9438765,9449090,9455285,9459580,9461889,9463629,9464031,9478757,9480391,9481171,9490181,9491769,9493335,9494342,9494970,9498807,9510891,	TN1_HUMAN	39059
AJ242973	chr8	+	9782860	10157287	9783061	10166857	6	9782860,9936377,9973848,10030078,10048427,10166892,	9783203,9936446,9973786,10030183,10048534,10167287,	MSRA_HUMAN	6395
AY168348	chr8	-	10334893	10383847	10335439	10351746	4	10334893,10344980,10351137,10383442,	10341891,10345132,10351785,10383847,	Q8IWN7	11658
AK055556	chr8	-	10453281	10459057	10454282	10458978	2	10453281,10458740,	10456211,10459057,	SOX7_HUMAN	36397
AK000572	chr8	-	10493703	10568416	10493945	10568301	7	10493703,10548737,10554896,10550209,10561438,10563210,1056882,	10494461,10548814,10554789,10550288,10561629,10563320,1056818,	PII1_HUMAN	9150
BC024146	chr8	-	10624683	10731028	10628496	10653302	3	10624683,10653178,10730832,	10627461,10653375,10731028,	Q8TBA0	18487
AJ305312	chr8	-	10838335	10838271	10836720	10837011	1	10838335,	10838271,	Q8WWP8	20435

FIG. 9.A1

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AJ312027 chr8 -	10851926	10854809	10852331	10852637	2	10851825,10854302,	10853381,10854809,	Q8TCU8	18953
AJ312026 chr8 -	10855014	10859780	10857345	10857588	2	10855014,10857203,	10855816,10859780,	Q8TCU9	18954
AJ307469 chr8 -	10865446	10867152	10868041	10868328	1	10865446,	10867152,	Q8WWP6	20432
AJ301560 chr8 -	10923010	10929883	10923885	10929883	2	10923010,10929119,	10923785,10929883,	Q98KT3	24395
AJ301561 chr8 -	10976169	10998409	10976169	10976257	2	10976169,10996332,	10976333,10998409,	Q98KT2	24394
AJ291676 chr8 -	11012043	11013812	11012551	11012914	1	11012043,	11013812,	Q98KT8	24398
AJ297823 chr8 +	11013350	11056681	11013432	11051332	10	11013350,11023737,11028588,11033384,11034733,11038070,11043488,11045218,11048230,11051168,	11013814,11023846,11028892,11033558,11034951,11038232,11043808,11045437,11048382,11056881,	Q98QG7	25632
AL080178 chr8 +	11045418	11053063	11045418	11051332	3	11045418,11048230,11051168,	11045437,11048382,11053063,	Q9Y4N8	37070
AJ291677 chr8 +	11059529	11080730	11059650	11080887	1	11059529,	11080730,	Q98KT7	24397
AJ301562 chr8 +	11068180	11096998	11068221	11093347	9	11068180,11084848,11086678,11087767,11089929,11090178,11093263,11094126,	11088283,11084835,11086722,11087828,11089007,11090351,11093533,11094268,	Q98KT1	24393
AK05776 chr8 + 2	11076188	11094632	11084883	11093347	8	11076188,11083812,11084848,11086679,11087767,11090178,11093263,11094126,	11076249,11083722,11084836,11088722,11087828,11090351,11093533,11094268,	Q98LV8	24852
AY10118 chr8 + 6	11084683	11094266	11084683	11093347	7	11084683,11086878,11087767,11089929,11090178,11093263,11094126,	11084835,11088722,11087828,11090079,11090351,11093533,11094268,	Q8IZJ8	12514
AY10118 chr8 + 7	11084683	11094266	11084683	11091468	7	11084683,11086878,11087767,11090178,11093263,11094126,	11084835,11088722,11087828,11090351,11093533,11094268,	Q8IZJ5	12513
AJ301563 chr8 +	11098945	11187201	11183609	11187088	7	11098945,11112358,1128608,11182463,11183373,11186583,11186979,	11098989,11112645,1129708,11182678,11186754,11187088,	Q98KT0	24392
AL834122 chr8 -	11160008	11195288	11162918	11172955	3	11160008,11172574,11195188,	11163180,11173352,11195288,	CH13_HU MAN	3027
S76617 chr8 +	11222543	11293142	11271787	11292651	13	11222543,11271788,11274594,11278574,11277668,11278701,11283263,11283874,11285200,11286504,11289844,11291521,11292445,	11223134,11271890,11274848,11276868,11277668,11278805,11283402,11284027,11285380,11288581,11289985,11291853,11293142,	BLK_HU MAN	2373
AJ291678 chr8 +	11305077	11309884	11309412	11309691	3	11305077,11308912,11309012,	11305880,11307184,11309884,	Q98KT6	24398
AF318320 chr8 +	11438581	11439084	11438855	11437479	1	11438581,	11439084,	Q8WYX8	20868
L34357 chr8 +	11438615	11487874	11438855	11487018	6	11438615,11477461,11478653,11483588,11485477,11486835,	11437471,11477628,11478779,11483878,11485628,11487874,	GAT4_HU MAN	4597
AK05553 chr8 + 4	11489798	11491768	11489956	11490849	1	11489798,	11491768,	Q98NF6	26189
AK09738 chr8 + 9	11498251	11515888	11508185	11514818	4	11498251,11508140,11511746,11514505,	11498334,11508493,11511942,11515888,	Q8N842	15149
AK05620 chr8 + 6	11498290	11515888	11499990	11514818	6	11498290,11499988,11508140,11511745,11514505,	11498878,11500128,11508493,11511942,11515888,	Q989S2	21234
X89141 chr8 +	11531288	11567841	11531375	11567152	8	11531288,11537336,11538208,11560282,11564586,11568788,1156060,11568930,	11531474,11537434,11538393,11560421,11564586,11568963,1156013,11567841,	FDFT_HU MAN	4319
BC01024 chr8 - 0	11572868	11598822	11573667	11581997	11	11572868,11574203,11575594,11576221,11576609,11577588,11579408,11581152,11581871,11592918,11596543,	11573785,11574332,11575711,11576385,11576605,11577707,11579523,11581238,11582022,11593005,11598822,	CATB_HU MAN	2738
Y18460 chr8 -	11574222	11579423	11574222	11579423	7	11574222,11576594,11576722,11576809,11576835,11576888,11576908,	11574332,11576711,11576835,11576888,11576908,	CAA7717	2565
AK09125 chr8 + 9	11742884	11748017	11743049	11744128	1	11742884,	11748017,	Q8N249	13155
AK09813 chr8 - 8	12057113	12059056	12080419	12068044	7	12057113,12058189,12060357,12061681,12064782,12066752,12068948,	12058085,12058690,12060507,12061815,12064883,12068815,1206968,	Q8N7N1	14992
BC00798 chr8 - 3	12057125	12088656	12057828	12057981	8	12057125,12058137,12060357,12061333,12061681,12064782,12068752,12068853,	12058085,12068690,12060507,12061699,12061815,12064883,12068853,	Q88HX9	23595
AK09441 chr8 + 7	12197852	12199613	12197857	12198318	2	12197852,12198352,	12198324,12199613,	Q8N9J4	15842

FIG. 9.A2

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AK09254	chr8	+	12211008	12213990	12211155	12211554	1	12211008,	12213990,	Q8NAJ9	16005
4											
AK07432	chr8	-	12354606	12369463	12355798	12369408	7	12354608,12358427,12	12355855,12368580,12	Q8TEA0	18288
9								361801,12361874,1236	361764,12362033,1236		
								4436,12367986,123694	4558,12368101,123694		
								01,	63,		
BC00453	chr8	-	12354608	12361920	12355798	12361920	4	12354608,12358427,12	12355855,12368580,12	Q8BSV1	28939
8								361801,12361874,	361764,12361920,		

FIG. 9A3

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#name	chrom	strand	txStart	txEnd	cdsStart	cdsEnd	exonCount	exonStarts	exonEnds	proteinID	alignID
AB002292	chr8	+	1922721	2057379	1922721	2056009	29	1922721,1942099 ,1956705,195684 2,1963118,19652 71,1967939,1975 316,1978793,198 1380,1984346,19 92314,1993138,1 995078,1997178, 2002028,2004318 ,2008040,202170 9,2022213,20225 19,2024026,2025 122,2027172,202 8031,2032645,20 44226,2051450,2 055494,	1922859,1942182,195686 1,1956930,1963182,1965 348,1967998,1975480,19 78910,1981495,1984453, 1992392,1993318,199519 5,1997271,2002197,2004 462,2008216,2021825,20 22341,2022620,2024150, 2025209,2027396,202818 8,2032668,2044401,2051 573,2057379, 19,2024026,2025 122,2027172,202 8031,2032645,20 44226,2051450,2 055494,	O15013	7189
BC040474	chr8	+	1957500	2002856	1965341	2002251	13	1957500,1958842 ,1963115,196527 1,1967939,19753 18,1981380,1984 346,1982314,199 3138,1986078,19 97178,2002026,	1957582,1958930,196318 2,1965348,1967998,1975 480,1981495,1984453,19 92392,1993318,1995195, 1997271,2002658, 1997271,2002658,	Q8IWD9	11475
BC036809	chr8	+	1974798	2026259	1975308	2025284	15	1974798,1981380 ,1984346,199231 4,1993138,19950 78,1997178,2002 029,2004316,200 8040,2021709,20 22213,2022518,2 024031,2025122,	1975480,1981495,198445 3,1992392,1993318,1995 185,1997271,2002197,20 04462,2008218,2021825, 2022341,2022620,202415 0,2026259, 2022341,2022620,202415	Q8IY77	12062
AF009205	chr8	+	1981401	2057387	1981401	2056009	19	1981401,1984346 ,1992314,199313 8,1995078,19971 78,2002028,2004 316,2008040,202 1709,2022213,20 22519,2024026,2 027172,2028031, 2032545,2044228 ,2051450,205549 4,	1981495,1984453,199239 2,1993318,1995195,1997 271,2002197,2004462,20 08218,2021825,2022341, 2022620,2024150,202739 6,2028189,2032668,2044 401,2051573,2057387,	O14865	7078
AB018254	chr8	+	2072623	2105682	2099938	2101810	2	2072623,2099030	2072681,2105682,	Y711_HU MAN	39892
X69089	chr8	+	2143827	2243960	2149460	2243485	37	2143827,2149448 ,2150855,215604 5,2156320,21578 53,2167876,2168 145,2171004,217 1898,2174800,21 77394,2178220,2 183974,2188410, 2190753,2192378 ,2194668,219728 6,2199245,22010 36,2204611,2204 860,2207158,220 7765,2214331,22 14589,2218253,2 221704,2222007, 2222631,2227694 ,2239225,223964 3,2240879,22419 04,2243187,	2143863,2149567,215101 1,2156184,2158478,2157 946,2168085,2168198,21 71189,2172180,2174942, 2177594,2178274,218410 2,2188594,2190928,2192 498,2194854,2197393,21 99424,2201151,2204768, 2204967,2207201,220790 2,2214476,2214849,2216 321,2221818,2222095,22 22670,2227800,2239389, 2239880,2240902,224198 0,2243980, 221704,2222007, 2222631,2227694 ,2239225,223964 3,2240879,22419 04,2243187,	MYM2_H UMAN	8485
BC030605	chr8	-	2597655	2631033	2612570	2631033	5	2597655,2603235 ,2604295,261245 1,2630962,	2598920,2603374,260437 5,2612601,2631033,	Q8NCP1	18734

FIG. 9B1

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AF333704	chr8	-	2946200	5002909	2946686	5002619	70	2946200,2950573 ,2957400,295833 2,2959215,29623 25,2963690,2965 797,2969242,297 0567,2971323,29 73878,2974671,2 981218,2982552, 2986713,3008112 ,3008059,302657 8,3037420,30805 63,3095198,3099 617,3104950,311 4629,3115819,31 16704,3118259,3 126500,3150586, 3159498,3165998 ,3170280,318921 1,3195970,31989 89,3198013,3207 815,3209713,321 3605,3222598,32 27356,3231830,3 236141,3292245, 3315798,3316413 ,3351395,335609 3,3367253,33751 33,3377355,3395 595,3404295,340 7492,3414128,34 18000,3417524,3 476814,3601725, 3583047,3594238 ,3624812,371651 8,3762032,40060 05,4040007,4428	2946846,2950708,295748 8,2958445,2959377,2962 370,2963870,2965909,29 69316,2970741,2971497, 2974056,2974848,298140 1,2982726,2986902,3006 288,3008233,3026752,30 37815,3080749,3095387, 3089784,3105139,311474 3,3116900,3116850,3118 437,3126689,3150776,31 59815,3166068,3170378, 3169316,3196069,319711 3,3198217,3207911,3209 827,3213722,3222793,32 27544,3231989,3238333, 3292448,3315923,331660 5,3351552,3356263,3367 442,3375349,3377472,33 3404483,3407831, 3418327,341770 8,3476927,3501828,3583 169,3594366,3624900,37 16594,3762145,4006213, 4040202,4428168,464566 1,5002908,	Q66RM4	25766
AY017307	chr8	-	2946200	5002804	2946686	5002519	67	2946200,2950573 ,2957400,295833 2,2959215,29623 25,2963690,2965 797,2969242,297 0567,2971323,29 73878,2974671,2 981218,2982552, 2986713,3008112 ,3008059,3037420 3116900,3116850,311843 7,3126689,3150776,3159 815,3166068,3170378,31 89316,3196069,3197113, 3198217,3207911,320982 7,3213722,3222793,3227 544,3231989,3238333,32 92448,3315923,3316605, 3351552,3356263,336744 2,3375349,3377472,3395 784,3404483,3407831,34 14323,3416327,3417708, 3476927,3501829,358316 8,3594366,3624900,3716 594,3762145,4006213,40 40202,4428168,4645661, 5002804,	Q96QU9	25714	
A8067477	chr8	-	3159348	3375351	3159480	3375351	21	3159348,3165998 ,3170280,318921 1,3195970,31989 88,3198013,3207 815,3209713,321 3605,3222598,32 27356,3231830,3 238141,3292245, 3315798,3316413 ,3351395,335609 3,3367253,33751 33, 3159615,3166068,317037 9,3189316,3189067,3197 113,3198217,3207911,32 09827,3213722,3222793, 3227544,3231989,323833 3,3292448,3315923,3316 805,3351552,3356263,33 67442,3375351,	Q96PZ7	25558	
BC030702	chr8	+	8414658	8454869	8439652	8453657	9	8414658,8414703 ,8417380,842286 2,8422985,8439688,8444 8,8439600,84441 284,8447198,8450258,84 54868, 188,8452484,	Q8NEMO	17402	

FIG. 9B2

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AK022909	chr8	+	6439852	6652387	6439852	6651151	12 6439852,6444149 ,6447054,645018 8,6452494,64632 44,6485685,6488 615,6507953,662 9555,6651095,66 52339,	6439688,6444284,644719 8,6450258,6453649,6463 354,6485733,6488978,65 08031,6629793,6651398, 6652387,	Q9H8C7	30909
AF004327	chr8	-	6510773	6708927	6511202	6571038	11 6510773,6517033 ,6521779,652277 8,6527985,65292 79,6535858,6540 433,6570748,668 8811,8708914,	6511363,6517184,652194 8,6522880,6628099,6529 512,6535778,6540589,65 71345,6888922,6708927, 6708927,	AGP2_H UMAN	1889
AF218015	chr8	-	6510819	6571118	6511202	6528325	9 6510819,6517033 ,6521779,652277 8,6527985,65292 79,6535858,6540 433,6570748,	6511363,6517184,652194 8,6522880,6528093,6529 512,6535778,6540589,65 71118,	Q9HBP3	31507
AJ289780	chr8	-	6540527	6540883	6540527	6540565	1 6540527,	6540893,	Q9H4C1	29562
AJ289781	chr8	-	6570748	6571511	6570748	6571038	1 6570748,	6571511,	Q9H4C0	29581
AK057771	chr8	-	6623705	6625300	6624765	6625248	1 6623705,	6625300,	Q98LV3	24649
AL136587	chr8	+	6716768	6767767	6716770	6765480	8 6716768,6732971 ,6738812,674068 2,6749782,67557 71,6763152,6765 264,	6716989,6733041,673892 8,6740752,6748853,6755 930,6783276,6787787,	PLCE_H UMAN	9192
X92744	chr8	-	6888489	6895911	6888577	6895744	2 6888489,6895883 ,6895908,	6888723,6895811, 5,	BD01_HU MAN	2331
M98331	chr8	-	6942378	6943735	6942500	6943717	2 6942378,6943524 ,6955908,	6942810,6943735, 5,	DEF6_HU MAN	3743
X65977	chr8	-	6953503	6955945	6953700	6954580	3 6953503,6954408 ,6955908,	6953822,6954592,695594 5,	DEF4_HU MAN	3742
BC027917	chr8	-	6995290	6997714	6995411	6998278	3 6995290,6998101 ,6997654,	6995521,6996288,699771 4,	DEFN_H UMAN	3748
NM_005217	chr8	-	6995294	6997727	6995411	6998278	3 6995294,6998101 ,6997654,	6995521,6996288,699772 7,	DEFN_H UMAN	dna87

FIG. 9B3

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#name	chrom	strand	txStart	txEnd	cdsStart	cdsEnd	exonCount	exonStarts	exonEnds	proteinID	alignID
AK094299	chr8	+	12584056	12840371	12584805	12823846	4	12584056,12 584763,1262 3534,126389 02,	12584082, Q8N9K7 12585059, 12623701, 12640371,	15665	
BC016833	chr8	+	12639326	12658738	12645491	12654745	3	12639326,12 645384,1265 3708,	12639344, Q96AW6 12645558, 12656738,	21542	
AB040889	chr8	+	12644964	12658866	12645329	12654745	2	12644964,12 653708,	12645558, Q9P272 12658866,	34672	
AB051610	chr8	-	12716063	13147507	12718511	13132850	18	12716063,12 718990,1272 1187,127229 62,12724018, 12725312,12 727459,1272 7788,127310 99,12732047, 12735490,12 743442,1274 8288,128379 69,13026253, 13034170,13 131749,1314 7302,	12718632, RHG7_HU 12718164, MAN 12721405, 12723171, 12724133, 12725528, 12727658, 12727946, 12731278, 12733471, 12735554, 12743524, 12748358, 12838003, 13026394, 13034320, 13132897, 13147507,	37623	
AK024773	chr8	-	12847258	13147466	12847326	13132772	6	12847258,12 937969,1302 6253,130341 70,13131749, 13147302,	12847475, Q9H7A2 12938003, 13026394, 13034320, 13132897, 13147466,	30261	
BC031245	chr8	+	13199595	13200984	13199892	13200652	1	13199595,	13200984, Q96LL4	24566	
AK058156	chr8	+	13200164	13200988	13200232	13200652	1	13200164,	13200988, Q96LJ9	24551	
AY028700	chr8	-	13722564	14187627	13723143	14187627	7	13722564,13 735078,1374 0863,137972 80,13870292, 13956803,14 187432,	13723338, Q98LD1 13735200, 13740936, 13787403, 13870380, 13956905, 14187627,	24519	
BC010370	chr8	+	15172923	15397187	15173131	15396919	10	15172923,15 255780,1528 3397,152922 07,15294856, 15306447,15 353368,1537 6238,153810 75,15396903, 15381166, 15397187,	15173269, Q96FW0 15255950, 15283515, 15292348, 15294997, 15306537, 15363430, 15376313, 15381166, 15397187,	22983	
U42349	chr8	+	15172983	15396995	15173131	15390510	11	15172983,15 255780,1528 3397,152922 07,15294856, 15306447,15 353368,1537 6238,153810 75,15390491, 15396903,	15173269, N33_HUM 15255950, AN 15283515, 15292348, 15294997, 15306537, 15363430, 15376313, 15381166, 15390558, 15396995,	6508	

FIG. 9C1

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D90187	chr8	-	15742169	15825340	15742785	15810689	10	15742159,15 753118,1577 6258,157829 31,15787764, 15798765,15 801158,1580 7887,158105 86,15825288, 15810693, 15825340,	15742919, MSRE_H 15753307, UMAN 15776312, 15783012, 15787845, 15801571, 15808001, 15810693, 15825340,	8398
AF037351	chr8	-	15742785	15810689	15742785	15810689	8	15742785,15 776258,1578 2931,157877 64,15798765, 15801158,15 807887,1581 0586, 15810689,	15742919, O60505 15776312, 15783012, 15787845, 15798952, 15801571, 15808001, 15810689,	7691
AB044277	chr8	-	16659728	16689069	16659975	16668936	3	16659728,16 682558,1668 8850, 16669069,	16660221, FGFK_HU 16662682, MAN 16669069,	4345
BC032868	chr8	+	16694192	16789537	16694182	16785679	15	16694192,16 730987,1673 6591,187448 88,16748596, 16752139,16 763867,1675 7449,167653 61,16771294, 16772316,16 780996,1678 3346,167856 10,16787191, 16783504, 16785679, 16789537,	16694564, Q8IYZ3 16731141, 16736623, 16744765, 16748944, 16752222, 16753939, 16757488, 16765457, 16771395, 16772488, 16781105, 16783504, 16785679, 16789537,	12338
BC039253	chr8	+	16823425	16889636	16823627	16884116	13	16823425,16 851682,1685 3234,168824 07,16884485, 16885284,16 872558,1687 4863,168788 35,16877291, 16882140,16 884075,1688 7159, 16882253, 16884150, 16889636,	16823757, ZDH2_HU 16851719, MAN 16853329, 16862528, 16864555, 16865317, 16872879, 16874988, 16876962, 16877384, 16882253, 16884150, 16889636,	39908
BC007315	chr8	-	16896131	16913744	16897623	16912056	7	16896131,16 899356,1690 1619,169041 15,16909895, 16911839,16 913578, 16912151, 16913744,	16897661, Q96IQ8 16899441, 16901784, 16904277, 16910089, 16912151, 16913744,	23830
L46722	chr8	-	16897449	16913669	16897623	16911987	7	16897449,16 899330,1690 1619,169041 15,16909895, 16911939,16 913592, 16912155, 16913669,	16897752, CNO7_HU 16899441, MAN 16901784, 16904277, 16910089, 16912155, 16913669,	3229

FIG. 9C2



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AK057204 chr8 +	16913874	16982482	16914148	16953331	12 16913874,16 16914273, Q96DL9 22334 932810,1693 16932885, 5181,169357 16935278, 59,16941638, 16935860, 16943300,16 16941862, 946931,1694 16943371, 7142,169472 16947059, 78,16951378, 16947201, 16953250,16 16947347, 961890, 16951520, 16953331, 16962462,
AL834189 chr8 +	16913997	16984477	16914148	16941750	12 16913997,16 16914273, Q8N3D7 13580 932810,1693 16932885, 5181,169357 16935278, 59,16938898, 16935860, 16941678,16 16938967, 943300,1694 16941862, 6931,169471 16943371, 42,16951378, 16947059, 16953250,16 16947347, 961890, 16951520, 16953331, 16964477,
BC022383 chr8 +	16941711	16962464	16943327	16953331	8 16941711,16 16941862, Q8TBL7 18567 943300,1694 16943371, 6931,169471 16947059, 42,16947278, 16947201, 16951378,16 16947347, 953250,1696 16951520, 1690, 16953331, 16962464,
AF073482 chr8 -	16968557	17015981	16969009	17015981	9 16968557,16 16969184, MTR7_HU 6428 971282,1697 16971423, MAN 2660,169781 16972881, 80,16978414, 16978230, 16980185,16 16978540, 998053,1700 16980305, 8268,170168 16988188, 58, 17008401, 17015981,
U76368 chr8 +	17205708	17231869	17210251	17231953	12 17205708,17 17205834, O15291 7280 210228,1721 17210627, 1358,172155 17211515, 89,17217211, 17215755, 17218674,17 17217345, 221770,1722 17218897, 5119,172271 17221907, 52,17228768, 17225222, 17230409,17 17227358, 231758, 17228935, 17230518, 17231869,
D29990 chr8 +	17210251	17231953	17210251	17231953	11 17210251,17 17210827, CTR2_HU 3519 211359,1721 17211515, MAN 5589,172172 17215755, 11,17218674, 17217345, 17221384,17 17218897, 225119,1722 17221524, 7152,172287 17225222, 68,17230409, 17227358, 17231758, 17228935, 17230518, 17231953,
U76369 chr8 +	17218848	17227260	17218848	17227260	4 17218848,17 17218897, O15292 7281 221384,1722 17221524, 5119,172271 17225222, 52, 17227260,

FIG. 9C3

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D37965	chr8	+	17244009	17309927	17244070	17309814	6	17244009,17 258260,1728 7863,172952 98,17300888, 17309425,	17244125, Q15198 17266558, 17288015, 17295583, 17301028, 17309927,	10188
AF121259	chr8	-	17310808	17384190	17312738	17384190	10	17310808,17 313794,1731 6858,173199 98,17320237, 17321373,17 322675,1734 1998,173511 40,17384089,	17312952, Q8WTT9 17313892, 17316775, 17320094, 17320311, 17321479, 17322878, 17342065, 17351355, 17384190,	19818
AB033114	chr8	-	17310816	17422546	17312738	17422546	14	17310816,17 313794,1731 6858,173199 98,17320237, 17321373,17 322675,1734 1998,173511 40,17380028, 17382579,17 390484,1741 0416,174205 28,	17312952, Q9ULD2 17313892, 17316775, 17320094, 17320311, 17321479, 17322878, 17342065, 17351355, 17380065, 17382714, 17390648, 17410812, 17422546,	36001
AK024357	chr8	-	17310816	17351358	17312738	17322693	9	17310816,17 313794,1731 6858,173199 98,17320237, 17321373,17 322675,1734 1998,173511 40,	17312952, Q9H7T2 17313892, 17316775, 17320094, 17320311, 17321479, 17322878, 17342065, 17351358,	30425

FIG. 9C4

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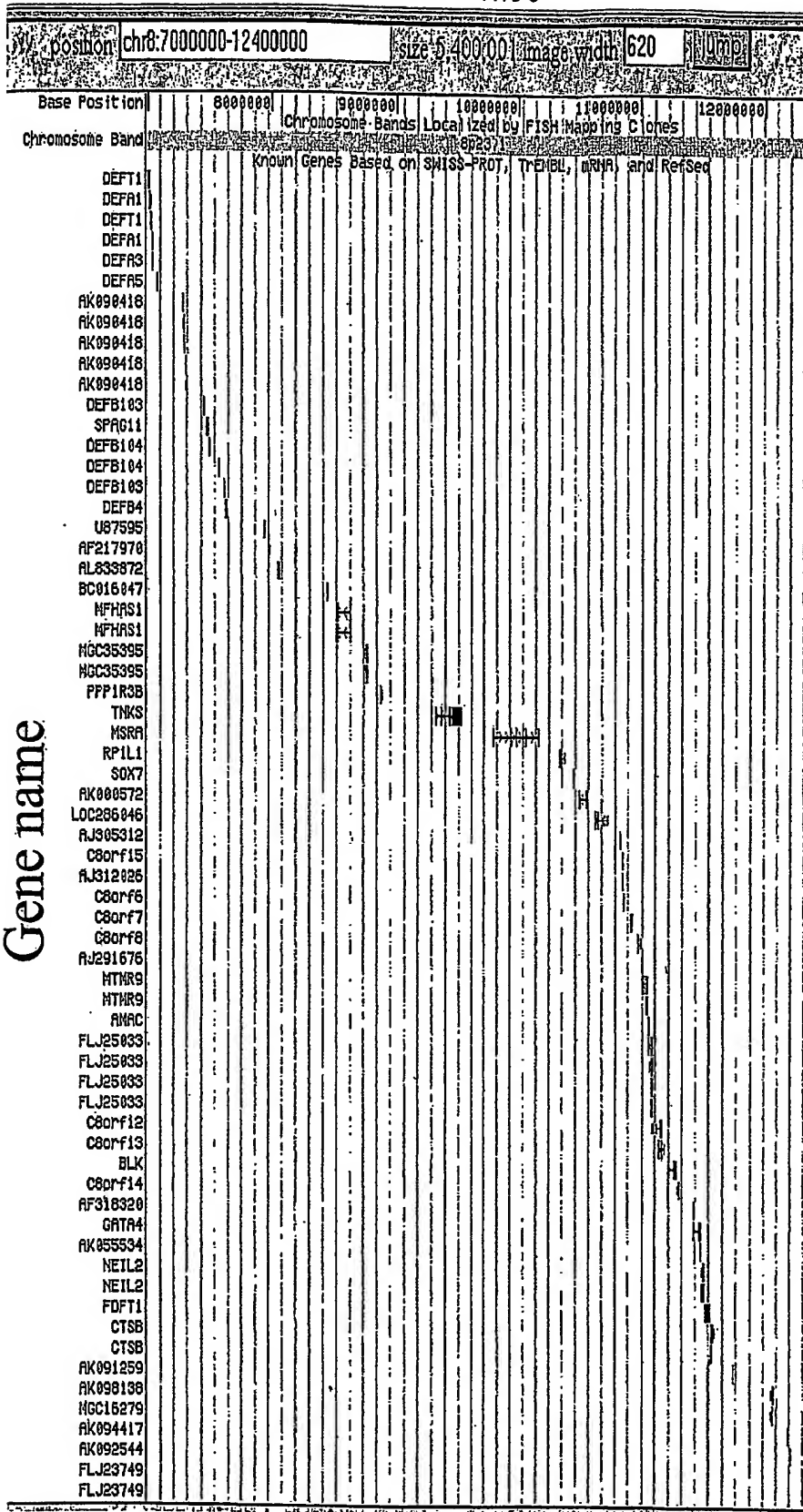
Position  
Build 33

FIG. 10

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**Appendix 3: Output of correlation of 120 markers with orientation.**

Marker 1	Marker 2	D-prime	Correlation squared	P-value
AC022239-5	INVSNP	0.310348	0.0235464	0.0105919
AC068974-2	INVSNP	0.717901	0.246708	9.88E-10
AF131215-1	INVSNP	0.669229	0.208883	2.91E-10
AF131215-2	INVSNP	0.826054	0.543927	4.99E-21
AF131215-4	INVSNP	0.71176	0.250012	1.52E-13
AF188029-1	INVSNP	0.276857	0.0154451	0.130948
AF188029-10	INVSNP	0.164122	0.0138136	0.0107372
AF188029-12	INVSNP	0.220334	0.0103093	0.238536
AF188029-7	INVSNP	0.236232	0.0350131	0.0207016
AF287957-1	INVSNP	0.0873719	0.00252711	0.677768
D8S1130	INVSNP	0.360552	0.0267458	0.00277162
D8S1469	INVSNP	0.292488	0.0453051	0.00238796
D8S1695	INVSNP	0.749707	0.308838	8.65E-19
D8S1721	INVSNP	0.387456	0.0361409	0.00124697
D8S1759	INVSNP	0.635416	0.0727243	8.14E-11
D8S1825	INVSNP	0.804892	0.245683	3.89E-21
D8S265	INVSNP	0.655468	0.118719	2.06E-13
D8S351	INVSNP	0.67781	0.0971108	2.35E-12
D8S503	INVSNP	0.47876	0.101609	4.21E-06
D8S516	INVSNP	0.470889	0.129417	6.12E-08
D8S520	INVSNP	0.350366	0.0304078	8.61E-05
D8S542	INVSNP	0.444143	0.0821856	1.23E-07
D8S550	INVSNP	0.487033	0.0303895	7.80E-08
DG00AAHBG	INVSNP	0.595792	0.336392	0.00458499
DG00AAHBH	INVSNP	0.565833	0.180968	9.35E-05
DG00AAHBI	INVSNP	0.504277	0.179788	1.08E-05
DG8S117	INVSNP	0.442753	0.0220656	0.203544
DG8S118	INVSNP	0.383535	0.00698894	0.426846
DG8S127	INVSNP	0.890818	0.488779	5.89E-14
DG8S128	INVSNP	0.456743	0.125524	0.000221348
DG8S130	INVSNP	0.536247	0.132253	1.39E-05
DG8S134	INVSNP	1	0.0635899	2.52E-08
DG8S136	INVSNP	0.343063	0.0516092	0.00690024
DG8S137	INVSNP	0.655751	0.119269	2.42E-05
DG8S138	INVSNP	1	0.0584634	1.06E-07
DG8S147	INVSNP	0.566881	0.286732	6.58E-07
DG8S148	INVSNP	0.361632	0.0374806	2.22E-06
DG8S153	INVSNP	0.782853	0.210606	1.11E-15
DG8S155	INVSNP	0.604283	0.115256	3.42E-05
DG8S156	INVSNP	0.653866	0.330724	2.82E-11
DG8S159	INVSNP	0.568915	0.0133872	6.52E-05
DG8S161	INVSNP	0.841182	0.349055	6.81E-13
DG8S163	INVSNP	0.906095	0.589869	2.03E-23

**FIG. 11A1**

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DG8S170	INVSNP	0.598019	0.302949	9.06E-11
DG8S177	INVSNP	0.320809	0.0215085	0.0422176
DG8S179	INVSNP	0.847218	0.471189	1.85E-13
DG8S181	INVSNP	0.714733	0.114141	2.32E-14
DG8S182	INVSNP	0.928892	0.197453	4.75E-08
DG8S188	INVSNP	0.136714	0.0106358	0.397153
DG8S192	INVSNP	0.217607	0.00997323	0.11848
DG8S197	INVSNP	0.764207	0.562667	2.34E-20
DG8S201	INVSNP	0.401621	0.0651737	0.000188696
DG8S212	INVSNP	1	0.036627	0.000368682
DG8S215	INVSNP	0.634833	0.146446	0.00116656
DG8S221	INVSNP	0.749998	0.165545	4.76E-17
DG8S232	INVSNP	0.347365	0.0307383	9.65E-11
DG8S238	INVSNP	1	0.0587153	7.29E-08
DG8S242	INVSNP	0.653286	0.403859	2.34E-10
DG8S245	INVSNP	0.0176728	2.32E-05	0.964474
DG8S249	INVSNP	0.434415	0.0358435	0.000176876
DG8S250	INVSNP	0.292022	0.0130765	0.182875
DG8S257	INVSNP	0.692608	0.369707	2.27E-15
DG8S258	INVSNP	0.3934	0.0637854	3.86E-06
DG8S261	INVSNP	0.757129	0.456215	6.63E-12
DG8S262	INVSNP	0.377734	0.0699983	0.00163984
DG8S265	INVSNP	0.387668	0.0643316	2.82E-06
DG8S266	INVSNP	0.558352	0.163973	1.11E-09
DG8S269	INVSNP	0.848498	0.61698	4.80E-24
DG8S271	INVSNP	0.475146	0.0674433	0.0049336
DG8S277	INVSNP	0.67332	0.138379	7.54E-08
DG8S285	INVSNP	0.182512	0.0225009	0.0857807
DG8S291	INVSNP	0.353319	0.078499	3.25E-08
DG8S292	INVSNP	0.502266	0.0559657	0.0189892
DG8S297	INVSNP	0.612404	0.142293	7.12E-09
DG8S298	INVSNP	1	0.122989	1.38E-14
DG8S301	INVSNP	0.159911	0.0113507	0.30016
DG8S302	INVSNP	0.507425	0.0728255	5.40E-11
DG8S303	INVSNP	0.516468	0.058	0.00460405
DG8S307	INVSNP	0.159702	0.0130769	0.238871
DG8S308	INVSNP	0.137742	0.00542977	0.0390388
DG8S316	INVSNP	0.694406	0.255881	3.36E-14
DG8S322	INVSNP	0.63348	0.188425	2.38E-13
DG8S323	INVSNP	0.406188	0.0403898	0.100275
DG8S324	INVSNP	0.650941	0.11013	1.90E-07
DG8S332	INVSNP	0.313896	0.0289007	0.0141458
DG8S333	INVSNP	0.770327	0.14615	4.97E-05
SG08S100	INVSNP	0.569098	0.132393	5.34E-05
SG08S102	INVSNP	0.853475	0.439721	1.16E-15
SG08S112	INVSNP	0.197699	0.0283795	0.097256
SG08S120	INVSNP	0.737674	0.471808	1.75E-17
SG08S138	INVSNP	0.765567	0.36206	6.68E-12
SG08S15	INVSNP	0.723465	0.394925	1.39E-14
SG08S26	INVSNP	0.72974	0.432938	2.31E-14
SG08S27	INVSNP	0.76487	0.456719	2.37E-15

FIG. 11A2

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SG08S32	INVSNP	0.690147	0.448406	2.61E-15
SG08S35	INVSNP	0.715979	0.189307	1.18E-07
SG08S39	INVSNP	0.647568	0.244516	1.18E-06
SG08S42	INVSNP	0.462881	0.0770168	0.00761203
SG08S46	INVSNP	0.217101	0.00836067	0.296584
SG08S5	INVSNP	0.857381	0.643837	3.21E-25
SG08S50	INVSNP	0.491729	0.109579	0.000666173
SG08S506	INVSNP	0.468844	0.152268	0.000162305
SG08S507	INVSNP	0.849207	0.288162	3.04E-11
SG08S508	INVSNP	0.82544	0.332851	8.52E-12
SG08S510	INVSNP	0.89446	0.140689	2.35E-05
SG08S511	INVSNP	0.490152	0.238296	9.66E-07
SG08S512	INVSNP	0.514179	0.259522	4.85E-08
SG08S517	INVSNP	0.854815	0.442687	2.34E-15
SG08S520	INVSNP	0.827061	0.336667	1.87E-11
SG08S6	INVSNP	0.708812	0.27657	3.63E-09
SG08S70	INVSNP	0.856961	0.442137	5.74E-16
SG08S71	INVSNP	0.861792	0.456188	9.88E-17
SG08S73	INVSNP	0.852942	0.437359	9.84E-15
SG08S76	INVSNP	0.935397	0.436358	6.37E-17
SG08S90	INVSNP	0.489091	0.155061	7.64E-06
SG08S93	INVSNP	0.227004	0.0196952	0.237642
SG08S94	INVSNP	0.910261	0.2108	1.39E-05
SG08S95	INVSNP	0.844958	0.641432	5.16E-20
SG08S96	INVSNP	0.585711	0.160415	4.65E-05
SG08S97	INVSNP	0.146921	0.00392928	0.618463

FIG. 11A3

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Appendix 3: Output of allelic frequencies associated with the orientation.

P-value	Relative Risk	Number of Affecteds	Frequency in Affecteds	Number of Controls	Frequency in Controls	Frequency under Null Hypothesis	Chi-square Statistic	Information	Allele of Marker 1	Marker 1	Allele of Marker 2	Marker 2
0.999994	1	0	0.350143	115	0.350143	0.350143	5.92E-11	1	4	AC022239-5	1	INVSNP
0.999994	1	0	0.262901	115	0.262901	0.262901	5.48E-11	1	4	AC022239-5	2	INVSNP
0.999993	1	0	0.186733	115	0.186733	0.186733	8.20E-11	1	0	AC022239-5	1	INVSNP
0.999993	1	0	0.08718	115	0.08718	0.08718	7.50E-11	1	0	AC022239-5	2	INVSNP
0.999992	1	0	0.080516	115	0.080516	0.080516	8.88E-11	1	8	AC022239-5	1	INVSNP
0.999993	1	0	0.008441	115	0.008441	0.008441	8.59E-11	1	8	AC022239-5	2	INVSNP
0.999992	1	0	0.021739	115	0.021739	0.021739	8.90E-11	1	-4	AC022239-5	1	INVSNP
0.999992	1	0	0.004348	115	0.004348	0.004348	8.90E-11	1	-12	AC022239-5	2	INVSNP
1	1	0	0.031192	73	0.031192	0.031192	0	1	12	AC068974-2	1	INVSNP
1	1	0	0.057849	73	0.057849	0.057849	-1.14E-13	1	12	AC068974-2	2	INVSNP
1	1	0	0.083645	73	0.083645	0.083645	0	1	14	AC068974-2	1	INVSNP
1	1	0	0.162931	73	0.162931	0.162931	-1.14E-13	1	14	AC068974-2	2	INVSNP
1	1	0	0.46354	73	0.46354	0.46354	0	1	0	AC068974-2	1	INVSNP
1	1	0	0.009063	73	0.009063	0.009063	-2.27E-13	1	0	AC068974-2	2	INVSNP
1	1	0	0.031432	73	0.031432	0.031432	-2.27E-13	1	16	AC068974-2	1	INVSNP
1	1	0	0.057609	73	0.057609	0.057609	-2.27E-13	1	16	AC068974-2	2	INVSNP
1	1	0	0.020548	73	0.020548	0.020548	-2.27E-13	1	6	AC068974-2	2	INVSNP
1	1	0	0.027041	73	0.027041	0.027041	1.14E-13	1	10	AC068974-2	1	INVSNP
1	1	0	0.007205	73	0.007205	0.007205	0	1	10	AC068974-2	2	INVSNP
1	1	0	0.013699	73	0.013699	0.013699	-2.27E-13	1	20	AC068974-2	2	INVSNP
1	1	0	0.006988	73	0.006988	0.006988	-1.14E-13	1	8	AC068974-2	1	INVSNP
1	1	0	0.013562	73	0.013562	0.013562	0	1	8	AC068974-2	2	INVSNP
1	1	0	0.008849	73	0.008849	0.008849	-2.27E-13	1	18	AC068974-2	2	INVSNP
1	1	0	0.006849	73	0.006849	0.006849	-2.27E-13	1	13	AC068974-2	1	INVSNP
0.999991	1	0	0.078213	111	0.078213	0.078213	1.19E-10	1	0	AF131215-1	1	INVSNP
0.999991	1	0	0.047913	111	0.047913	0.047913	1.19E-10	1	0	AF131215-1	2	INVSNP
0.999991	1	0	0.38885	111	0.38885	0.38885	1.18E-10	1	2	AF131215-1	1	INVSNP
0.999991	1	0	0.025564	111	0.025564	0.025564	1.18E-10	1	2	AF131215-1	2	INVSNP
0.999991	1	0	0.066388	111	0.066388	0.066388	1.18E-10	1	-2	AF131215-1	1	INVSNP
0.999992	1	0	0.228404	111	0.228404	0.228404	1.11E-10	1	-2	AF131215-1	2	INVSNP
0.999991	1	0	0.014005	111	0.014005	0.014005	1.19E-10	1	22	AF131215-1	1	INVSNP
0.999991	1	0	0.004013	111	0.004013	0.004013	1.17E-10	1	22	AF131215-1	2	INVSNP
0.999992	1	0	0.002636	111	0.002636	0.002636	1.04E-10	1	-4	AF131215-1	1	INVSNP
0.999991	1	0	0.006373	111	0.006373	0.006373	1.16E-10	1	-4	AF131215-1	2	INVSNP
0.999991	1	0	0.028457	111	0.028457	0.028457	1.14E-10	1	8	AF131215-1	1	INVSNP
0.999991	1	0	0.003074	111	0.003074	0.003074	1.15E-10	1	8	AF131215-1	2	INVSNP
0.999991	1	0	0.063063	111	0.063063	0.063063	1.20E-10	1	4	AF131215-1	1	INVSNP
0.999991	1	0	0.013514	111	0.013514	0.013514	1.20E-10	1	-6	AF131215-1	2	INVSNP
0.999991	1	0	0.007036	111	0.007036	0.007036	1.16E-10	1	10	AF131215-1	1	INVSNP
0.999991	1	0	0.024496	111	0.024496	0.024496	1.18E-10	1	-10	AF131215-1	2	INVSNP
1	1	0	0.531611	116	0.531611	0.531611	0	1	0	AF131215-2	1	INVSNP
1	1	0	0.024423	116	0.024423	0.024423	0	1	0	AF131215-2	2	INVSNP
1	1	0	0.076954	116	0.076954	0.076954	-1.14E-13	1	4	AF131215-2	1	INVSNP
1	1	0	0.328219	116	0.328219	0.328219	0	1	4	AF131215-2	2	INVSNP
1	1	0	0.025056	116	0.025056	0.025056	0	1	8	AF131215-2	1	INVSNP
1	1	0	0.013738	116	0.013738	0.013738	-1.14E-13	1	8	AF131215-2	2	INVSNP
0.999998	1	0	0.430154	114	0.430154	0.430154	4.89E-12	1	0	AF131215-4	1	INVSNP
0.999998	1	0	0.0216	114	0.0216	0.0216	5.00E-12	1	0	AF131215-4	2	INVSNP
0.999998	1	0	0.164039	114	0.164039	0.164039	4.55E-12	1	14	AF131215-4	1	INVSNP
0.999998	1	0	0.257014	114	0.257014	0.257014	4.55E-12	1	14	AF131215-4	2	INVSNP
1	1	0	0.008176	114	0.008176	0.008176	3.41E-13	1	12	AF131215-4	1	INVSNP
0.999998	1	0	0.066386	114	0.066386	0.066386	4.09E-12	1	12	AF131215-4	2	INVSNP
0.999998	1	0	0.030702	114	0.030702	0.030702	4.89E-12	1	8	AF131215-4	1	INVSNP
0.999998	1	0	0.007281	114	0.007281	0.007281	5.00E-12	1	16	AF131215-4	1	INVSNP
0.999998	1	0	0.005877	114	0.005877	0.005877	4.89E-12	1	16	AF131215-4	2	INVSNP
0.999998	1	0	0.004386	114	0.004386	0.004386	4.89E-12	1	18	AF131215-4	2	INVSNP
0.999998	1	0	0.004386	114	0.004386	0.004386	4.89E-12	1	10	AF131215-4	1	INVSNP
0.999962	1	0	0.040595	114	0.040595	0.040595	2.30E-09	1	-6	AF188029-1	1	INVSNP
0.999962	1	0	0.012037	114	0.012037	0.012037	2.29E-09	1	-8	AF188029-1	2	INVSNP
0.999962	1	0	0.208582	114	0.208582	0.208582	2.27E-09	1	0	AF188029-1	1	INVSNP
0.999962	1	0	0.072119	114	0.072119	0.072119	2.28E-09	1	0	AF188029-1	2	INVSNP
0.999962	1	0	0.116762	114	0.116762	0.116762	2.30E-09	1	-8	AF188029-1	1	INVSNP
0.999962	1	0	0.106922	114	0.106922	0.106922	2.30E-09	1	-8	AF188029-1	2	INVSNP
0.999962	1	0	0.127628	114	0.127628	0.127628	2.29E-09	1	-4	AF188029-1	1	INVSNP
0.999962	1	0	0.1138	114	0.1138	0.1138	2.29E-09	1	-4	AF188029-1	2	INVSNP
0.999962	1	0	0.026068	114	0.026068	0.026068	2.28E-09	1	2	AF188029-1	1	INVSNP
0.999962	1	0	0.017792	114	0.017792	0.017792	2.28E-09	1	2	AF188029-1	2	INVSNP
0.999962	1	0	0.017544	114	0.017544	0.017544	2.30E-09	1	-12	AF188029-1	1	INVSNP

FIG. 11B1

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0.999962	1	0	0.077087	114	0.077087	0.077087	2.29E-09	1	-2	AF188029-1	1	INVSNP
0.999962	1	0	0.015018	114	0.015018	0.015019	2.29E-09	1	-2	AF188029-1	2	INVSNP
0.999962	1	0	0.026085	114	0.026085	0.026085	2.29E-09	1	-10	AF188029-1	1	INVSNP
0.999962	1	0	0.009003	114	0.009003	0.009003	2.30E-09	1	-10	AF188029-1	2	INVSNP
0.999962	1	0	0.013158	114	0.013158	0.013158	2.30E-09	1	4	AF188029-1	2	INVSNP
0.999945	1	0	0.262927	114	0.262927	0.262929	4.81E-09	1	0	AF188029-10	1	INVSNP
0.999945	1	0	0.140582	114	0.140582	0.14058	4.82E-09	1	0	AF188029-10	2	INVSNP
0.999945	1	0	0.28156	114	0.28156	0.281559	4.79E-09	1	2	AF188029-10	1	INVSNP
0.999945	1	0	0.108791	114	0.108791	0.108792	4.82E-09	1	2	AF188029-10	2	INVSNP
0.999945	1	0	0.024981	114	0.024981	0.024981	4.82E-09	1	8	AF188029-10	1	INVSNP
0.999945	1	0	0.071511	114	0.071511	0.07151	4.84E-09	1	8	AF188029-10	2	INVSNP
0.999945	1	0	0.030975	114	0.030975	0.030975	4.84E-09	1	4	AF188029-10	1	INVSNP
0.999945	1	0	0.01727	114	0.01727	0.017271	4.82E-09	1	4	AF188029-10	2	INVSNP
0.999945	1	0	0.035522	114	0.035522	0.035521	4.82E-09	1	-2	AF188029-10	1	INVSNP
0.999945	1	0	0.021496	114	0.021496	0.021496	4.82E-09	1	-2	AF188029-10	2	INVSNP
0.999945	1	0	0.004386	114	0.004386	0.004386	4.84E-09	1	8	AF188029-10	1	INVSNP
0.999906	1	0	0.117898	115	0.117898	0.117897	1.40E-08	1	0	AF188029-12	1	INVSNP
0.999806	1	0	0.047319	115	0.047319	0.047321	1.40E-08	1	0	AF188029-12	2	INVSNP
0.999906	1	0	0.058949	115	0.058949	0.058949	1.40E-08	1	4	AF188029-12	1	INVSNP
0.999906	1	0	0.045399	115	0.045399	0.045399	1.40E-08	1	4	AF188029-12	2	INVSNP
0.999906	1	0	0.339813	115	0.339813	0.339813	1.40E-08	1	-12	AF188029-12	1	INVSNP
0.999906	1	0	0.225405	115	0.225405	0.225404	1.40E-08	1	-12	AF188029-12	2	INVSNP
0.999906	1	0	0.109427	115	0.109427	0.109428	1.40E-08	1	-4	AF188029-12	1	INVSNP
0.999906	1	0	0.029704	115	0.029704	0.029702	1.40E-08	1	-4	AF188029-12	2	INVSNP
0.999906	1	0	0.004348	115	0.004348	0.004348	1.40E-08	1	12	AF188029-12	2	INVSNP
0.999906	1	0	0.021739	115	0.021739	0.021739	1.40E-08	1	8	AF188029-12	1	INVSNP
0.999999	1	0	0.398707	115	0.398707	0.398707	5.68E-13	1	0	AF188029-7	1	INVSNP
0.999999	1	0	0.149119	115	0.149119	0.149119	3.41E-13	1	0	AF188029-7	2	INVSNP
0.999999	1	0	0.230861	115	0.230861	0.230861	8.82E-13	1	-4	AF188029-7	1	INVSNP
0.999999	1	0	0.190878	115	0.190878	0.190878	5.68E-13	1	-4	AF188029-7	2	INVSNP
0.999999	1	0	0.005215	115	0.005215	0.005215	7.96E-13	1	2	AF188029-7	1	INVSNP
0.999999	1	0	0.007828	115	0.007828	0.007828	7.96E-13	1	2	AF188029-7	2	INVSNP
0.999999	1	0	0.004348	115	0.004348	0.004348	7.96E-13	1	-2	AF188029-7	2	INVSNP
0.999999	1	0	0.004348	115	0.004348	0.004348	7.96E-13	1	4	AF188029-7	2	INVSNP
0.999999	1	0	0.008696	115	0.008696	0.008696	7.96E-13	1	8	AF188029-7	2	INVSNP
0.999994	1	0	0.315096	67	0.315096	0.315096	5.09E-11	1	0	AF287957-1	1	INVSNP
0.999992	1	0	0.162516	67	0.162516	0.162516	1.00E-10	1	0	AF287957-1	2	INVSNP
0.999994	1	0	0.246253	67	0.246253	0.246253	5.28E-11	1	-6	AF287957-1	1	INVSNP
0.999992	1	0	0.141807	67	0.141807	0.141808	1.02E-10	1	-6	AF287957-1	2	INVSNP
0.999992	1	0	0.007463	67	0.007463	0.007463	1.05E-10	1	4	AF287957-1	2	INVSNP
0.999992	1	0	0.048528	67	0.048528	0.048528	1.05E-10	1	-4	AF287957-1	1	INVSNP
0.999992	1	0	0.026098	67	0.026098	0.026098	1.04E-10	1	-4	AF287957-1	2	INVSNP
0.999992	1	0	0.009525	67	0.009525	0.009525	1.04E-10	1	2	AF287957-1	1	INVSNP
0.999992	1	0	0.012863	67	0.012863	0.012863	1.04E-10	1	2	AF287957-1	2	INVSNP
0.999992	1	0	0.007463	67	0.007463	0.007463	1.05E-10	1	-2	AF287957-1	2	INVSNP
0.999992	1	0	0.007463	67	0.007463	0.007463	1.05E-10	1	-14	AF287957-1	1	INVSNP
0.999992	1	0	0.014925	67	0.014925	0.014925	1.05E-10	1	-14	AF287957-1	2	INVSNP
0.999943	1	0	0.006547	130	0.006547	0.006547	5.05E-09	1	-12	D8S1130	1	INVSNP
0.999943	1	0	0.047299	130	0.047299	0.047299	6.05E-09	1	-12	D8S1130	2	INVSNP
0.999943	1	0	0.19591	130	0.19591	0.195911	6.03E-09	1	4	D8S1130	1	INVSNP
0.999944	1	0	0.061782	130	0.061782	0.061782	5.01E-09	1	4	D8S1130	2	INVSNP
0.999943	1	0	0.124013	130	0.124013	0.124013	5.05E-09	1	0	D8S1130	1	INVSNP
0.999943	1	0	0.037526	130	0.037526	0.037526	5.05E-09	1	0	D8S1130	2	INVSNP
0.999943	1	0	0.064837	130	0.064837	0.064837	5.05E-09	1	8	D8S1130	1	INVSNP
0.999943	1	0	0.042855	130	0.042855	0.042855	5.05E-09	1	8	D8S1130	2	INVSNP
0.999943	1	0	0.099089	130	0.099089	0.099089	5.05E-09	1	-8	D8S1130	1	INVSNP
0.999943	1	0	0.127834	130	0.127834	0.127834	5.05E-09	1	-8	D8S1130	2	INVSNP
0.999943	1	0	0.109906	130	0.109906	0.109906	5.05E-09	1	-4	D8S1130	1	INVSNP
0.999943	1	0	0.032402	130	0.032402	0.032402	5.05E-09	1	-4	D8S1130	2	INVSNP
0.999943	1	0	0.038462	130	0.038462	0.038462	5.05E-09	1	12	D8S1130	1	INVSNP
0.999943	1	0	0.011236	130	0.011236	0.011236	5.04E-09	1	16	D8S1130	1	INVSNP
0.999942	1	0	0.000303	130	0.000303	0.000303	5.27E-09	1	16	D8S1130	2	INVSNP
0.999987	1	0	0.163471	128	0.163471	0.163471	2.77E-10	1	0	D8S1469	1	INVSNP
0.999987	1	0	0.113873	128	0.113873	0.113873	2.77E-10	1	0	D8S1469	2	INVSNP
0.999987	1	0	0.393429	128	0.393429	0.393429	2.77E-10	1	4	D8S1469	1	INVSNP
0.999987	1	0	0.110477	128	0.110477	0.110477	2.73E-10	1	4	D8S1469	2	INVSNP
0.999987	1	0	0.075679	128	0.075679	0.075679	2.76E-10	1	8	D8S1469	1	INVSNP
0.999987	1	0	0.068852	128	0.068852	0.068852	2.75E-10	1	8	D8S1469	2	INVSNP
0.999987	1	0	0.003906	128	0.003906	0.003906	2.81E-10	1	12	D8S1469	2	INVSNP
0.999987	1	0	0.009673	128	0.009673	0.009673	2.81E-10	1	3	D8S1469	1	INVSNP
0.999987	1	0	0.037202	128	0.037202	0.037202	2.81E-10	1	3	D8S1469	2	INVSNP
0.999987	1	0	0.006185	128	0.006185	0.006185	2.69E-10	1	-4	D8S1469	1	INVSNP
0.999987	1	0	0.017253	128	0.017253	0.017253	2.80E-10	1	-4	D8S1469	2	INVSNP
0.999927	1	0	0.487276	123	0.487276	0.487276	8.27E-09	1	0	D8S1695	1	INVSNP
0.999927	1	0	0.028984	123	0.028984	0.028984	8.27E-09	1	0	D8S1695	2	INVSNP
0.999927	1	0	0.02341	123	0.02341	0.023411	8.26E-09	1	8	D8S1695	1	INVSNP
0.999928	1	0	0.208297	123	0.208297	0.208296	8.25E-09	1	8	D8S1695	2	INVSNP
0.999927	1	0	0.007843	123	0.007843	0.007842	8.26E-09	1	8	D8S1695	1	INVSNP
0.999927	1	0	0.045003	123	0.045003	0.045004	8.26E-09	1	8	D8S1695	2	INVSNP
0.999927	1	0	0.008341	123	0.008341	0.008341	8.27E-09	1	10	D8S1695	1	INVSNP
0.999927	1	0	0.028245	123	0.028245	0.028245	8.27E-09	1	10	D8S1695	2	INVSNP
0.999927	1	0	0.09789	123	0.09789	0.09789	8.26E-09	1	4	D8S1695	1	INVSNP
0.999927	1	0	0.032191	123	0.032191	0.032191	8.27E-09	1	4	D8S1695	2	INVSNP

FIG. 11B2



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0.999927	1	0	0.009386	123	0.009386	0.009386	8.26E-09	1	12	D8S1695	1	INVSNP
0.999928	1	0	0.006874	123	0.006874	0.006874	8.26E-09	1	12	D8S1695	2	INVSNP
0.999927	1	0	0.01826	123	0.01826	0.01826	8.27E-09	1	2	D8S1695	1	INVSNP
0.999555	1	0	0.236048	94	0.236048	0.236048	3.11E-07	1	34	D8S1721	1	INVSNP
0.999555	1	0	0.029909	94	0.029909	0.02991	3.12E-07	1	34	D8S1721	2	INVSNP
0.999555	1	0	0.042553	94	0.042553	0.042553	3.12E-07	1	36	D8S1721	1	INVSNP
0.999555	1	0	0.252583	94	0.252583	0.252587	3.12E-07	1	0	D8S1721	1	INVSNP
0.999555	1	0	0.114438	94	0.114438	0.114434	3.11E-07	1	0	D8S1721	2	INVSNP
0.999555	1	0	0.08138	94	0.08138	0.081379	3.12E-07	1	2	D8S1721	1	INVSNP
0.999555	1	0	0.051599	94	0.051599	0.0516	3.12E-07	1	2	D8S1721	2	INVSNP
0.999555	1	0	0.014775	94	0.014775	0.014775	3.12E-07	1	4	D8S1721	1	INVSNP
0.999555	1	0	0.070331	94	0.070331	0.070331	3.12E-07	1	4	D8S1721	2	INVSNP
0.999555	1	0	0.015957	94	0.015957	0.015957	3.12E-07	1	8	D8S1721	1	INVSNP
0.999555	1	0	0.006553	94	0.006553	0.006553	3.12E-07	1	24	D8S1721	1	INVSNP
0.999555	1	0	0.046638	94	0.046638	0.046638	3.12E-07	1	24	D8S1721	2	INVSNP
0.999555	1	0	0.015957	94	0.015957	0.015957	3.12E-07	1	32	D8S1721	1	INVSNP
0.999555	1	0	0.005319	94	0.005319	0.005319	3.12E-07	1	38	D8S1721	1	INVSNP
0.999555	1	0	0.005319	94	0.005319	0.005319	3.12E-07	1	6	D8S1721	1	INVSNP
0.999555	1	0	0.009724	94	0.009724	0.009721	3.12E-07	1	30	D8S1721	1	INVSNP
0.999553	1	0	0.000914	94	0.000914	0.000917	3.14E-07	1	30	D8S1721	2	INVSNP
0.999999	1	0	0.320948	130	0.320948	0.320948	4.55E-13	1	0	D8S1759	1	INVSNP
0.999999	1	0	0.279052	130	0.279052	0.279052	5.68E-13	1	0	D8S1759	2	INVSNP
0.999999	1	0	0.070538	130	0.070538	0.070538	4.55E-13	1	2	D8S1759	1	INVSNP
0.999999	1	0	0.006385	130	0.006385	0.006385	4.55E-13	1	2	D8S1759	2	INVSNP
0.999999	1	0	0.019231	130	0.019231	0.019231	5.68E-13	1	6	D8S1759	2	INVSNP
0.999999	1	0	0.080769	130	0.080769	0.080769	5.68E-13	1	4	D8S1759	1	INVSNP
0.999999	1	0	0.134615	130	0.134615	0.134615	6.82E-13	1	12	D8S1759	1	INVSNP
0.999999	1	0	0.014158	130	0.014158	0.014158	3.41E-13	1	10	D8S1759	1	INVSNP
0.999999	1	0	0.024304	130	0.024304	0.024304	7.96E-13	1	10	D8S1759	2	INVSNP
0.999999	1	0	0.021279	130	0.021279	0.021279	6.82E-13	1	14	D8S1759	1	INVSNP
0.999999	1	0	0.005644	130	0.005644	0.005644	6.82E-13	1	14	D8S1759	2	INVSNP
0.999999	1	0	0.007692	130	0.007692	0.007692	6.82E-13	1	16	D8S1759	1	INVSNP
0.999999	1	0	0.015385	130	0.015385	0.015385	6.82E-13	1	8	D8S1759	2	INVSNP
1	1	0	0.122402	119	0.122402	0.122402	0	1	0	D8S1825	1	INVSNP
1	1	0	0.314573	119	0.314573	0.314573	2.27E-13	1	0	D8S1825	2	INVSNP
1	1	0	0.078908	119	0.078908	0.078908	1.14E-13	1	8	D8S1825	1	INVSNP
1	1	0	0.009327	119	0.009327	0.009327	0	1	8	D8S1825	2	INVSNP
1	1	0	0.117647	119	0.117647	0.117647	0	1	10	D8S1825	1	INVSNP
1	1	0	0.205882	119	0.205882	0.205882	0	1	8	D8S1825	1	INVSNP
1	1	0	0.085346	119	0.085346	0.085346	1.14E-13	1	2	D8S1825	1	INVSNP
1	1	0	0.023898	119	0.023898	0.023898	-1.14E-13	1	2	D8S1825	2	INVSNP
1	1	0	0.015866	119	0.015866	0.015866	0	1	4	D8S1825	1	INVSNP
1	1	0	0.005143	119	0.005143	0.005143	0	1	4	D8S1825	2	INVSNP
1	1	0	0.016807	119	0.016807	0.016807	0	1	12	D8S1825	1	INVSNP
1	1	0	0.004202	119	0.004202	0.004202	0	1	14	D8S1825	1	INVSNP
1	1	0	0.107339	121	0.107339	0.107339	-2.27E-13	1	4	D8S265	1	INVSNP
1	1	0	0.235636	121	0.235636	0.235636	0	1	4	D8S265	2	INVSNP
1	1	0	0.085166	121	0.085166	0.085166	0	1	0	D8S265	1	INVSNP
1	1	0	0.087065	121	0.087065	0.087065	0	1	0	D8S265	2	INVSNP
1	1	0	0.016529	121	0.016529	0.016529	-4.55E-13	1	6	D8S265	2	INVSNP
1	1	0	0.057851	121	0.057851	0.057851	-4.55E-13	1	-6	D8S265	1	INVSNP
1	1	0	0.120883	121	0.120883	0.120883	-4.55E-13	1	2	D8S265	1	INVSNP
1	1	0	0.027878	121	0.027878	0.027878	-4.55E-13	1	2	D8S265	2	INVSNP
1	1	0	0.090909	121	0.090909	0.090909	-4.55E-13	1	18	D8S265	1	INVSNP
1	1	0	0.086777	121	0.086777	0.086777	-4.55E-13	1	12	D8S265	1	INVSNP
1	1	0	0.11157	121	0.11157	0.11157	-2.27E-13	1	14	D8S265	1	INVSNP
1	1	0	0.008264	121	0.008264	0.008264	-2.27E-13	1	16	D8S265	1	INVSNP
1	1	0	0.004132	121	0.004132	0.004132	-2.27E-13	1	1	D8S265	1	INVSNP
0.999885	1	0	0.020683	105	0.020683	0.020683	2.09E-08	1	0	D8S351	1	INVSNP
0.999885	1	0	0.079317	105	0.079317	0.079317	2.09E-08	1	0	D8S351	2	INVSNP
0.999885	1	0	0.12177	105	0.12177	0.121769	2.09E-08	1	18	D8S351	1	INVSNP
0.999885	1	0	0.035373	105	0.035373	0.035374	2.09E-08	1	18	D8S351	2	INVSNP
0.999885	1	0	0.017031	105	0.017031	0.017031	2.09E-08	1	2	D8S351	1	INVSNP
0.999885	1	0	0.187731	105	0.187731	0.187731	2.09E-08	1	2	D8S351	2	INVSNP
0.999885	1	0	0.177921	105	0.177921	0.177921	2.09E-08	1	6	D8S351	1	INVSNP
0.999885	1	0	0.017317	105	0.017317	0.017317	2.09E-08	1	6	D8S351	2	INVSNP
0.999885	1	0	0.028292	105	0.028292	0.028293	2.09E-08	1	10	D8S351	1	INVSNP
0.999885	1	0	0.005041	105	0.005041	0.00504	2.09E-08	1	10	D8S351	2	INVSNP
0.999885	1	0	0.052381	105	0.052381	0.052381	2.09E-08	1	8	D8S351	1	INVSNP
0.999885	1	0	0.036414	105	0.036414	0.036414	2.09E-08	1	20	D8S351	1	INVSNP
0.999885	1	0	0.020728	105	0.020728	0.020728	2.09E-08	1	20	D8S351	2	INVSNP
0.999885	1	0	0.071429	105	0.071429	0.071429	2.09E-08	1	4	D8S351	1	INVSNP
0.999885	1	0	0.067785	105	0.067785	0.067784	2.09E-08	1	16	D8S351	1	INVSNP
0.999885	1	0	0.008405	105	0.008405	0.008405	2.09E-08	1	16	D8S351	2	INVSNP
0.999885	1	0	0.02058	105	0.02058	0.02058	2.09E-08	1	14	D8S351	1	INVSNP
0.999885	1	0	0.017515	105	0.017515	0.017515	2.09E-08	1	14	D8S351	2	INVSNP
0.999885	1	0	0.004762	105	0.004762	0.004762	2.09E-08	1	12	D8S351	1	INVSNP
0.999885	1	0	0.004762	105	0.004762	0.004762	2.09E-08	1	-2	D8S351	2	INVSNP
0.999885	1	0	0.004762	105	0.004762	0.004762	2.09E-08	1	22	D8S351	2	INVSNP
0.999996	1	0	0.126777	122	0.126777	0.126777	2.98E-11	1	-6	D8S503	1	INVSNP
0.999996	1	0	0.20519	122	0.20519	0.20519	2.97E-11	1	-6	D8S503	2	INVSNP
0.999996	1	0	0.295435	122	0.295435	0.295435	2.67E-11	1	0	D8S503	1	INVSNP
0.999997	1	0	0.032434	122	0.032434	0.032434	1.80E-11	1	0	D8S503	2	INVSNP

FIG. 11B3

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0.999996	1	0	0.141876	122	0.141876	0.141876	2.35E-11	1	-2	D8S503	1	INVSNP
0.999997	1	0	0.058944	122	0.058944	0.058944	1.84E-11	1	-2	D8S503	2	INVSNP
0.999996	1	0	0.012912	122	0.012912	0.012912	2.96E-11	1	-4	D8S503	1	INVSNP
0.999996	1	0	0.036269	122	0.036269	0.036269	2.94E-11	1	-4	D8S503	2	INVSNP
0.999996	1	0	0.036885	122	0.036885	0.036885	2.98E-11	1	2	D8S503	1	INVSNP
0.999996	1	0	0.028547	122	0.028547	0.028547	2.83E-11	1	-8	D8S503	1	INVSNP
0.999996	1	0	0.012437	122	0.012437	0.012437	2.68E-11	1	-8	D8S503	2	INVSNP
0.999996	1	0	0.009208	122	0.009208	0.009208	2.86E-11	1	4	D8S503	1	INVSNP
0.999996	1	0	0.003088	122	0.003088	0.003088	2.63E-11	1	4	D8S503	2	INVSNP
0.999933	1	0	0.49559	130	0.49559	0.49559	7.13E-09	1	2	D8S516	1	INVSNP
0.999933	1	0	0.13518	130	0.13518	0.13518	7.14E-09	1	2	D8S516	2	INVSNP
0.999933	1	0	0.062919	130	0.062919	0.062919	7.14E-09	1	4	D8S516	1	INVSNP
0.999933	1	0	0.160158	130	0.160158	0.160158	7.13E-09	1	4	D8S516	2	INVSNP
0.999933	1	0	0.061539	130	0.061539	0.061539	7.14E-09	1	0	D8S516	1	INVSNP
0.999933	1	0	0.027153	130	0.027153	0.027153	7.13E-09	1	-2	D8S516	1	INVSNP
0.999933	1	0	0.030539	130	0.030539	0.030539	7.14E-09	1	-2	D8S516	2	INVSNP
0.999933	1	0	0.0028	130	0.0028	0.0028	7.13E-09	1	-4	D8S516	1	INVSNP
0.999933	1	0	0.004892	130	0.004892	0.004893	7.14E-09	1	-4	D8S516	2	INVSNP
0.999933	1	0	0.011539	130	0.011539	0.011539	7.14E-09	1	6	D8S516	2	INVSNP
0.999933	1	0	0.007692	130	0.007692	0.007692	7.14E-09	1	8	D8S516	2	INVSNP
0.999853	1	0	0.227223	114	0.227223	0.227224	3.38E-08	1	6	D8S520	1	INVSNP
0.999853	1	0	0.110496	114	0.110496	0.110495	3.38E-08	1	6	D8S520	2	INVSNP
0.999853	1	0	0.198127	114	0.198127	0.198129	3.38E-08	1	8	D8S520	1	INVSNP
0.999853	1	0	0.038715	114	0.038715	0.038713	3.38E-08	1	8	D8S520	2	INVSNP
0.999853	1	0	0.010655	114	0.010655	0.010655	3.38E-08	1	10	D8S520	1	INVSNP
0.999853	1	0	0.006889	114	0.006889	0.006889	3.38E-08	1	10	D8S520	2	INVSNP
0.999853	1	0	0.06697	114	0.06697	0.066968	3.38E-08	1	0	D8S520	1	INVSNP
0.999853	1	0	0.025135	114	0.025135	0.025137	3.38E-08	1	0	D8S520	2	INVSNP
0.999853	1	0	0.02375	114	0.02375	0.023751	3.38E-08	1	-10	D8S520	1	INVSNP
0.999853	1	0	0.04204	114	0.04204	0.042039	3.38E-08	1	-10	D8S520	2	INVSNP
0.999853	1	0	0.098406	114	0.098406	0.098405	3.38E-08	1	4	D8S520	1	INVSNP
0.999853	1	0	0.024401	114	0.024401	0.024402	3.38E-08	1	4	D8S520	2	INVSNP
0.999853	1	0	0.008772	114	0.008772	0.008772	3.38E-08	1	-12	D8S520	2	INVSNP
0.999853	1	0	0.014155	114	0.014155	0.014154	3.38E-08	1	2	D8S520	1	INVSNP
0.999853	1	0	0.091109	114	0.091109	0.091109	3.38E-08	1	2	D8S520	2	INVSNP
0.999853	1	0	0.005451	114	0.005451	0.005451	3.38E-08	1	-2	D8S520	1	INVSNP
0.999853	1	0	0.003321	114	0.003321	0.003321	3.38E-08	1	-2	D8S520	2	INVSNP
0.999853	1	0	0.004386	114	0.004386	0.004386	3.38E-08	1	12	D8S520	1	INVSNP
0.999994	1	0	0.310811	128	0.310811	0.310811	5.41E-11	1	0	D8S542	1	INVSNP
0.999993	1	0	0.212826	128	0.212826	0.212826	7.05E-11	1	0	D8S542	2	INVSNP
0.999993	1	0	0.293986	128	0.293986	0.293986	6.70E-11	1	2	D8S542	1	INVSNP
0.999993	1	0	0.018514	128	0.018514	0.018514	7.05E-11	1	2	D8S542	2	INVSNP
0.999993	1	0	0.043841	128	0.043841	0.04384	7.17E-11	1	4	D8S542	1	INVSNP
0.999994	1	0	0.120222	128	0.120222	0.120222	6.16E-11	1	4	D8S542	2	INVSNP
0.999997	1	0	0.096639	119	0.096639	0.096639	1.09E-11	1	-8	D8S550	1	INVSNP
0.999998	1	0	0.016099	119	0.016099	0.016099	9.56E-12	1	12	D8S550	1	INVSNP
0.999997	1	0	0.08054	119	0.08054	0.08054	1.07E-11	1	12	D8S550	2	INVSNP
0.999997	1	0	0.210239	119	0.210239	0.210239	1.11E-11	1	14	D8S550	1	INVSNP
0.999997	1	0	0.092282	119	0.092282	0.092282	1.09E-11	1	14	D8S550	2	INVSNP
0.999997	1	0	0.096639	119	0.096639	0.096639	1.09E-11	1	-2	D8S550	1	INVSNP
0.999997	1	0	0.012605	119	0.012605	0.012605	1.09E-11	1	8	D8S550	2	INVSNP
0.999998	1	0	0.019643	119	0.019643	0.019643	9.55E-12	1	18	D8S550	1	INVSNP
0.999998	1	0	0.026575	119	0.026575	0.026575	9.55E-12	1	18	D8S550	2	INVSNP
0.999997	1	0	0.071429	119	0.071429	0.071429	1.09E-11	1	-8	D8S550	1	INVSNP
0.999997	1	0	0.058397	119	0.058397	0.058397	1.11E-11	1	16	D8S550	1	INVSNP
0.999997	1	0	0.031838	119	0.031838	0.031838	1.00E-11	1	16	D8S550	2	INVSNP
0.999998	1	0	0.03105	119	0.03105	0.03105	7.50E-12	1	0	D8S550	1	INVSNP
0.999998	1	0	0.027773	119	0.027773	0.027773	6.59E-12	1	0	D8S550	2	INVSNP
0.999998	1	0	0.044723	119	0.044723	0.044723	8.19E-12	1	10	D8S550	1	INVSNP
0.999998	1	0	0.051918	119	0.051918	0.051918	7.98E-12	1	10	D8S550	2	INVSNP
0.999997	1	0	0.004202	119	0.004202	0.004202	1.09E-11	1	2	D8S550	1	INVSNP
0.999997	1	0	0.021008	119	0.021008	0.021008	1.09E-11	1	20	D8S550	2	INVSNP
0.999997	1	0	0.004202	119	0.004202	0.004202	1.09E-11	1	22	D8S550	2	INVSNP
0.999997	1	0	0.004202	119	0.004202	0.004202	1.09E-11	1	4	D8S550	1	INVSNP
0.999994	1	0	0.509649	23	0.509649	0.509649	5.65E-11	1	1	DG00AAHBG	1	INVSNP
0.999995	1	0	0.099047	23	0.099047	0.099047	3.39E-11	1	1	DG00AAHBG	2	INVSNP
0.999995	1	0	0.099047	23	0.099047	0.099047	3.39E-11	1	2	DG00AAHBG	1	INVSNP
0.999994	1	0	0.292258	23	0.292258	0.292258	5.36E-11	1	2	DG00AAHBG	2	INVSNP
0.999999	1	0	0.547767	107	0.547767	0.547767	2.96E-12	1	2	DG00AAHBH	1	INVSNP
0.999999	1	0	0.199897	107	0.199897	0.199897	2.56E-12	1	2	DG00AAHBH	2	INVSNP
0.999999	1	0	0.084383	107	0.084383	0.084383	1.08E-12	1	1	DG00AAHBH	1	INVSNP
0.999999	1	0	0.187954	107	0.187954	0.187954	2.61E-12	1	1	DG00AAHBH	2	INVSNP
0.999998	1	0	0.529477	107	0.529477	0.529477	6.08E-10	1	3	DG00AAHBI	1	INVSNP
0.999998	1	0	0.178131	107	0.178131	0.178131	6.16E-10	1	3	DG00AAHBI	2	INVSNP
0.999998	1	0	0.087345	107	0.087345	0.087346	6.20E-10	1	1	DG00AAHBI	1	INVSNP
0.999998	1	0	0.207047	107	0.207047	0.207047	6.14E-10	1	1	DG00AAHBI	2	INVSNP
0.999947	1	0	0.140205	94	0.140205	0.140204	4.48E-09	1	0	DG8S117	1	INVSNP
0.999947	1	0	0.030007	94	0.030007	0.030009	4.48E-09	1	0	DG8S117	2	INVSNP
0.999947	1	0	0.535327	94	0.535327	0.535328	4.41E-09	1	9	DG8S117	1	INVSNP
0.999947	1	0	0.294461	94	0.294461	0.29446	4.47E-09	1	9	DG8S117	2	INVSNP
0.999905	1	0	0.590828	128	0.590828	0.590827	1.41E-08	1	0	DG8S118	1	INVSNP
0.999905	1	0	0.331049	128	0.331049	0.331048	1.41E-08	1	0	DG8S118	2	INVSNP

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0.999905	1	0	0.061518	128	0.061518	0.061517	1.42E-08	1	5	DG8S118	1	INVSNP
0.999905	1	0	0.016607	128	0.016607	0.016609	1.42E-08	1	5	DG8S118	2	INVSNP
0.999853	1	0	0.464373	67	0.464373	0.464374	3.39E-08	1	0	DG8S127	1	INVSNP
0.999853	1	0	0.020702	67	0.020702	0.020701	3.40E-08	1	0	DG8S127	2	INVSNP
0.999853	1	0	0.100758	67	0.100758	0.100758	3.40E-08	1	6	DG8S127	1	INVSNP
0.999853	1	0	0.00372	67	0.00372	0.003721	3.39E-08	1	6	DG8S127	2	INVSNP
0.999853	1	0	0.061735	67	0.061735	0.061735	3.40E-08	1	1	DG8S127	1	INVSNP
0.999853	1	0	0.348712	67	0.348712	0.348712	3.40E-08	1	1	DG8S127	2	INVSNP
0.999999	1	0	0.590324	92	0.590324	0.590324	1.31E-12	1	0	DG8S128	1	INVSNP
0.999999	1	0	0.170548	92	0.170548	0.170546	1.14E-12	1	0	DG8S128	2	INVSNP
0.999999	1	0	0.094459	92	0.094459	0.094459	7.39E-13	1	4	DG8S128	1	INVSNP
0.999999	1	0	0.144672	92	0.144672	0.144672	1.02E-12	1	4	DG8S128	2	INVSNP
0.999995	1	0	0.394874	105	0.394874	0.394874	3.86E-11	1	4	DG8S130	1	INVSNP
0.999995	1	0	0.043221	105	0.043221	0.043221	4.32E-11	1	4	DG8S130	2	INVSNP
0.999995	1	0	0.253142	105	0.253142	0.253142	3.29E-11	1	0	DG8S130	1	INVSNP
0.999995	1	0	0.22781	105	0.22781	0.22781	3.16E-11	1	0	DG8S130	2	INVSNP
0.999995	1	0	0.028571	105	0.028571	0.028571	4.63E-11	1	-18	DG8S130	2	INVSNP
0.999995	1	0	0.004762	105	0.004762	0.004762	4.63E-11	1	-4	DG8S130	1	INVSNP
0.999995	1	0	0.009524	105	0.009524	0.009524	4.63E-11	1	-4	DG8S130	2	INVSNP
0.999995	1	0	0.023412	105	0.023412	0.023412	4.09E-11	1	8	DG8S130	1	INVSNP
0.999995	1	0	0.014683	105	0.014683	0.014683	3.91E-11	1	8	DG8S130	2	INVSNP
1	1	0	0.545082	122	0.545082	0.545082	0	1	0	DG8S134	1	INVSNP
1	1	0	0.352459	122	0.352459	0.352459	0	1	0	DG8S134	2	INVSNP
1	1	0	0.102459	122	0.102459	0.102459	0	1	4	DG8S134	1	INVSNP
0.99972	1	0	0.456736	104	0.456736	0.456738	1.23E-07	1	0	DG8S136	1	INVSNP
0.99972	1	0	0.187495	104	0.187495	0.187493	1.23E-07	1	0	DG8S136	2	INVSNP
0.99972	1	0	0.013739	104	0.013739	0.013739	1.24E-07	1	-6	DG8S136	1	INVSNP
0.99972	1	0	0.063184	104	0.063184	0.063184	1.24E-07	1	-6	DG8S136	2	INVSNP
0.99972	1	0	0.041344	104	0.041344	0.041344	1.24E-07	1	2	DG8S136	1	INVSNP
0.99972	1	0	0.025964	104	0.025964	0.025963	1.24E-07	1	2	DG8S136	2	INVSNP
0.999719	1	0	0.039577	104	0.039577	0.039575	1.24E-07	1	-4	DG8S136	1	INVSNP
0.999719	1	0	0.008499	104	0.008499	0.008502	1.24E-07	1	-4	DG8S136	2	INVSNP
0.99972	1	0	0.018587	104	0.018587	0.018587	1.24E-07	1	4	DG8S136	1	INVSNP
0.99972	1	0	0.024683	104	0.024683	0.024683	1.24E-07	1	4	DG8S136	2	INVSNP
0.99972	1	0	0.01333	104	0.01333	0.01333	1.24E-07	1	6	DG8S136	1	INVSNP
0.99972	1	0	0.029939	104	0.029939	0.029939	1.24E-07	1	6	DG8S136	2	INVSNP
0.999719	1	0	0.023742	104	0.023742	0.023741	1.24E-07	1	-2	DG8S136	1	INVSNP
0.999721	1	0	0.000297	104	0.000297	0.000297	1.22E-07	1	-2	DG8S136	2	INVSNP
0.99972	1	0	0.008331	104	0.008331	0.008331	1.24E-07	1	8	DG8S136	1	INVSNP
0.99972	1	0	0.039746	104	0.039746	0.039746	1.24E-07	1	8	DG8S136	2	INVSNP
0.99972	1	0	0.004808	104	0.004808	0.004808	1.24E-07	1	-14	DG8S136	2	INVSNP
0.999972	1	0	0.193763	38	0.193763	0.193763	1.21E-09	1	-2	DG8S137	1	INVSNP
0.999972	1	0	0.043079	38	0.043079	0.043079	1.23E-09	1	-2	DG8S137	2	INVSNP
0.999972	1	0	0.031265	38	0.031265	0.031265	1.23E-09	1	2	DG8S137	1	INVSNP
0.999972	1	0	0.008209	38	0.008209	0.008208	1.22E-09	1	2	DG8S137	2	INVSNP
0.999972	1	0	0.042557	38	0.042557	0.042557	1.24E-09	1	4	DG8S137	1	INVSNP
0.999972	1	0	0.062706	38	0.062706	0.062706	1.24E-09	1	4	DG8S137	2	INVSNP
0.999972	1	0	0.015798	38	0.015798	0.015798	1.25E-09	1	6	DG8S137	1	INVSNP
0.999972	1	0	0.194728	38	0.194728	0.194728	1.25E-09	1	6	DG8S137	2	INVSNP
0.999972	1	0	0.052632	38	0.052632	0.052632	1.25E-09	1	-4	DG8S137	1	INVSNP
0.999973	1	0	0.269248	38	0.269248	0.269248	1.18E-09	1	0	DG8S137	1	INVSNP
0.999972	1	0	0.046541	38	0.046541	0.046542	1.23E-09	1	0	DG8S137	2	INVSNP
0.999972	1	0	0.039474	38	0.039474	0.039474	1.25E-09	1	12	DG8S137	2	INVSNP
1	1	0	0.097345	113	0.097345	0.097345	0	1	-1	DG8S138	1	INVSNP
1	1	0	0.566372	113	0.566372	0.566372	0	1	0	DG8S138	1	INVSNP
1	1	0	0.336283	113	0.336283	0.336283	0	1	0	DG8S138	2	INVSNP
0.999995	1	0	0.131246	84	0.131246	0.131246	4.39E-11	1	0	DG8S147	1	INVSNP
0.999994	1	0	0.231849	84	0.231849	0.231849	5.45E-11	1	0	DG8S147	2	INVSNP
0.999994	1	0	0.553278	84	0.553278	0.553278	6.01E-11	1	2	DG8S147	1	INVSNP
0.999993	1	0	0.083627	84	0.083627	0.083627	6.68E-11	1	2	DG8S147	2	INVSNP
0.999998	1	0	0.075	120	0.075	0.075	4.89E-12	1	-4	DG8S148	1	INVSNP
0.999998	1	0	0.17032	120	0.17032	0.17032	4.66E-12	1	2	DG8S148	1	INVSNP
0.999998	1	0	0.07968	120	0.07968	0.07968	4.43E-12	1	2	DG8S148	2	INVSNP
0.999999	1	0	0.179826	120	0.179826	0.179826	3.52E-12	1	-2	DG8S148	1	INVSNP
0.999999	1	0	0.03684	120	0.03684	0.03684	4.55E-13	1	-2	DG8S148	2	INVSNP
0.999998	1	0	0.21652	120	0.21652	0.21652	4.55E-12	1	0	DG8S148	1	INVSNP
0.999998	1	0	0.204313	120	0.204313	0.204313	4.32E-12	1	0	DG8S148	2	INVSNP
0.999998	1	0	0.0375	120	0.0375	0.0375	4.89E-12	1	4	DG8S148	2	INVSNP
1	1	0	0.106162	114	0.106162	0.106162	2.27E-13	1	-2	DG8S153	1	INVSNP
1	1	0	0.306118	114	0.306118	0.306118	-2.27E-13	1	-2	DG8S153	2	INVSNP
1	1	0	0.123439	114	0.123439	0.123439	2.27E-13	1	0	DG8S153	1	INVSNP
1	1	0	0.012526	114	0.012526	0.012526	0	1	0	DG8S153	2	INVSNP
1	1	0	0.013158	114	0.013158	0.013158	3.41E-13	1	-8	DG8S153	2	INVSNP
1	1	0	0.030702	114	0.030702	0.030702	3.41E-13	1	2	DG8S153	1	INVSNP
1	1	0	0.129896	114	0.129896	0.129896	0	1	6	DG8S153	1	INVSNP
1	1	0	0.006068	114	0.006068	0.006068	0	1	8	DG8S153	2	INVSNP
1	1	0	0.026316	114	0.026316	0.026316	3.41E-13	1	14	DG8S153	1	INVSNP
1	1	0	0.132549	114	0.132549	0.132549	0	1	8	DG8S153	1	INVSNP
1	1	0	0.016573	114	0.016573	0.016573	1.14E-13	1	8	DG8S153	2	INVSNP
1	1	0	0.056199	114	0.056199	0.056199	-1.14E-13	1	10	DG8S153	1	INVSNP
1	1	0	0.005205	114	0.005205	0.005205	0	1	10	DG8S153	2	INVSNP

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1	1	0	0.02193	114	0.02193	0.02193	3.41E-13	1	4	DG8S153	1	INVSNP
1	1	0	0.008772	114	0.008772	0.008772	3.41E-13	1	12	DG8S153	1	INVSNP
1	1	0	0.004386	114	0.004386	0.004386	3.41E-13	1	-4	DG8S153	1	INVSNP
0.999903	1	0	0.335315	52	0.335315	0.335313	1.49E-08	1	4	DG8S155	1	INVSNP
0.999903	1	0	0.0493	52	0.0493	0.049302	1.49E-08	1	4	DG8S155	2	INVSNP
0.999903	1	0	0.019748	52	0.019748	0.019748	1.49E-08	1	8	DG8S155	1	INVSNP
0.999903	1	0	0.037944	52	0.037944	0.037944	1.49E-08	1	8	DG8S155	2	INVSNP
0.999903	1	0	0.042665	52	0.042665	0.042668	1.49E-08	1	2	DG8S155	1	INVSNP
0.999903	1	0	0.034258	52	0.034258	0.034258	1.49E-08	1	2	DG8S155	2	INVSNP
0.999903	1	0	0.02594	52	0.02594	0.02594	1.49E-08	1	8	DG8S155	1	INVSNP
0.999903	1	0	0.166368	52	0.166368	0.166368	1.49E-08	1	8	DG8S155	2	INVSNP
0.999903	1	0	0.028846	52	0.028846	0.028846	1.49E-08	1	14	DG8S155	1	INVSNP
0.999903	1	0	0.076923	52	0.076923	0.076923	1.49E-08	1	0	DG8S155	1	INVSNP
0.999903	1	0	0.093754	52	0.093754	0.093758	1.49E-08	1	10	DG8S155	1	INVSNP
0.999903	1	0	0.021631	52	0.021631	0.021628	1.49E-08	1	10	DG8S155	2	INVSNP
0.999903	1	0	0.040271	52	0.040271	0.040289	1.49E-08	1	12	DG8S155	1	INVSNP
0.999903	1	0	0.017422	52	0.017422	0.017423	1.49E-08	1	12	DG8S155	2	INVSNP
0.999903	1	0	0.009615	52	0.009615	0.009615	1.49E-08	1	-10	DG8S155	2	INVSNP
1	1	0	0.12722	115	0.12722	0.12722	0	1	6	DG8S158	1	INVSNP
1	1	0	0.255389	115	0.255389	0.255389	0	1	8	DG8S158	2	INVSNP
1	1	0	0.529302	115	0.529302	0.529302	0	1	0	DG8S158	1	INVSNP
1	1	0	0.062002	115	0.062002	0.062002	-1.14E-13	1	0	DG8S158	2	INVSNP
1	1	0	0.017391	115	0.017391	0.017391	-2.27E-13	1	-8	DG8S158	2	INVSNP
1	1	0	0.008696	115	0.008696	0.008696	-1.14E-13	1	9	DG8S158	2	INVSNP
1	1	0	0.602151	93	0.602151	0.602151	0	1	0	DG8S159	1	INVSNP
1	1	0	0.327957	93	0.327957	0.327957	-5.68E-14	1	0	DG8S159	2	INVSNP
1	1	0	0.05914	93	0.05914	0.05914	0	1	-2	DG8S159	1	INVSNP
1	1	0	0.010753	93	0.010753	0.010753	0	1	2	DG8S159	2	INVSNP
0.999992	1	0	0.440344	121	0.440344	0.440344	1.11E-10	1	0	DG8S161	1	INVSNP
0.999991	1	0	0.026598	121	0.026598	0.026598	1.24E-10	1	0	DG8S161	2	INVSNP
0.999991	1	0	0.200152	121	0.200152	0.200152	1.24E-10	1	2	DG8S161	1	INVSNP
0.999992	1	0	0.332906	121	0.332906	0.332906	1.09E-10	1	2	DG8S161	2	INVSNP
1	1	0	0.101264	126	0.101264	0.101264	5.68E-14	1	0	DG8S163	1	INVSNP
1	1	0	0.323339	126	0.323339	0.323339	1.14E-13	1	0	DG8S163	2	INVSNP
1	1	0	0.557466	126	0.557466	0.557466	5.68E-14	1	3	DG8S163	1	INVSNP
1	1	0	0.017931	126	0.017931	0.017931	1.14E-13	1	3	DG8S163	2	INVSNP
1	1	0	0.088646	114	0.088646	0.088646	-1.14E-13	1	0	DG8S170	1	INVSNP
1	1	0	0.222757	114	0.222757	0.222757	-1.14E-13	1	0	DG8S170	2	INVSNP
1	1	0	0.569248	114	0.569248	0.569248	1.14E-13	1	2	DG8S170	1	INVSNP
1	1	0	0.10819	114	0.10819	0.10819	0	1	2	DG8S170	2	INVSNP
1	1	0	0.013158	114	0.013158	0.013158	0	1	-4	DG8S170	2	INVSNP
0.999998	1	0	0.298785	87	0.298785	0.298785	5.57E-12	1	14	DG8S177	1	INVSNP
0.999998	1	0	0.172479	87	0.172479	0.172479	5.34E-12	1	14	DG8S177	2	INVSNP
0.999999	1	0	0.197931	87	0.197931	0.197931	3.41E-12	1	12	DG8S177	1	INVSNP
0.999999	1	0	0.037702	87	0.037702	0.037702	1.36E-12	1	12	DG8S177	2	INVSNP
0.999998	1	0	0.01485	87	0.01485	0.01485	4.21E-12	1	18	DG8S177	1	INVSNP
0.999998	1	0	0.042622	87	0.042622	0.042622	5.00E-12	1	18	DG8S177	2	INVSNP
0.999998	1	0	0.078902	87	0.078902	0.078902	4.66E-12	1	0	DG8S177	1	INVSNP
0.999998	1	0	0.013052	87	0.013052	0.013052	4.08E-12	1	0	DG8S177	2	INVSNP
0.999998	1	0	0.047463	87	0.047463	0.047463	5.57E-12	1	16	DG8S177	1	INVSNP
0.999998	1	0	0.067479	87	0.067479	0.067479	5.57E-12	1	16	DG8S177	2	INVSNP
0.999998	1	0	0.028736	87	0.028736	0.028736	5.68E-12	1	10	DG8S177	1	INVSNP
1	1	0	0.545727	91	0.545727	0.545727	0	1	0	DG8S179	1	INVSNP
1	1	0	0.025702	91	0.025702	0.025702	0	1	0	DG8S179	2	INVSNP
1	1	0	0.141086	91	0.141086	0.141086	0	1	7	DG8S179	1	INVSNP
1	1	0	0.287485	91	0.287485	0.287485	0	1	7	DG8S179	2	INVSNP
1	1	0	0.099143	83	0.099143	0.099143	-5.68E-13	1	10	DG8S181	1	INVSNP
1	1	0	0.159893	83	0.159893	0.159893	-1.14E-13	1	10	DG8S181	2	INVSNP
1	1	0	0.249128	83	0.249128	0.249128	-4.55E-13	1	12	DG8S181	1	INVSNP
1	1	0	0.015933	83	0.015933	0.015933	-4.55E-13	1	12	DG8S181	2	INVSNP
1	1	0	0.044465	83	0.044465	0.044465	-3.41E-13	1	4	DG8S181	1	INVSNP
1	1	0	0.057945	83	0.057945	0.057945	-1.14E-13	1	4	DG8S181	2	INVSNP
1	1	0	0.084337	83	0.084337	0.084337	-3.41E-13	1	0	DG8S181	2	INVSNP
1	1	0	0.204819	83	0.204819	0.204819	-3.41E-13	1	8	DG8S181	1	INVSNP
1	1	0	0.022928	83	0.022928	0.022928	-1.14E-13	1	16	DG8S181	1	INVSNP
1	1	0	0.007193	83	0.007193	0.007193	-2.27E-13	1	16	DG8S181	2	INVSNP
1	1	0	0.012048	83	0.012048	0.012048	-3.41E-13	1	18	DG8S181	2	INVSNP
1	1	0	0.042169	83	0.042169	0.042169	-3.41E-13	1	14	DG8S181	1	INVSNP
0.999993	1	0	0.648218	127	0.648218	0.648218	8.49E-11	1	0	DG8S182	1	INVSNP
0.999993	1	0	0.241546	127	0.241546	0.241546	8.43E-11	1	0	DG8S182	2	INVSNP
0.999993	1	0	0.005326	127	0.005326	0.005326	8.74E-11	1	-3	DG8S182	1	INVSNP
0.999993	1	0	0.10491	127	0.10491	0.10491	8.12E-11	1	-3	DG8S182	2	INVSNP
0.999997	1	0	0.482658	63	0.482658	0.482658	1.05E-11	1	0	DG8S188	1	INVSNP
0.999998	1	0	0.27131	63	0.27131	0.27131	8.55E-12	1	0	DG8S188	2	INVSNP
0.999998	1	0	0.128453	63	0.128453	0.128453	8.54E-12	1	-1	DG8S188	1	INVSNP
0.999998	1	0	0.117579	63	0.117579	0.117579	8.08E-12	1	-1	DG8S188	2	INVSNP
0.999385	1	0	0.353003	95	0.353003	0.353001	5.93E-07	1	0	DG8S192	1	INVSNP
0.999386	1	0	0.173313	95	0.173313	0.173308	5.93E-07	1	0	DG8S192	2	INVSNP
0.999386	1	0	0.102711	95	0.102711	0.10271	5.92E-07	1	2	DG8S192	1	INVSNP
0.999386	1	0	0.092026	95	0.092026	0.092027	5.92E-07	1	2	DG8S192	2	INVSNP
0.999386	1	0	0.005749	95	0.005749	0.00575	5.92E-07	1	16	DG8S192	1	INVSNP
0.999386	1	0	0.01004	95	0.01004	0.01004	5.92E-07	1	16	DG8S192	2	INVSNP

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0.999386	1	0	0.093843	95	0.093843	0.09384	5.92E-07	1	-2	DG8S192	1	INVSNP
0.999386	1	0	0.016884	95	0.016884	0.016887	5.92E-07	1	-2	DG8S192	2	INVSNP
0.999386	1	0	0.088837	95	0.088837	0.088829	5.91E-07	1	4	DG8S192	1	INVSNP
0.999386	1	0	0.004847	95	0.004847	0.004858	5.92E-07	1	4	DG8S192	2	INVSNP
0.999386	1	0	0.054804	95	0.054804	0.05481	5.91E-07	1	12	DG8S192	1	INVSNP
0.999386	1	0	0.013617	95	0.013617	0.013612	5.93E-07	1	12	DG8S192	2	INVSNP
0.999386	1	0	0.010528	95	0.010528	0.010526	5.92E-07	1	10	DG8S192	2	INVSNP
0.999386	1	0	0.57531	120	0.57531	0.57531	-5.68E-14	1	0	DG8S197	1	INVSNP
1	1	0	0.053857	120	0.053857	0.053857	0	1	0	DG8S197	2	INVSNP
1	1	0	0.06219	120	0.06219	0.06219	-5.68E-14	1	1	DG8S197	1	INVSNP
1	1	0	0.308643	120	0.308643	0.308643	-5.68E-14	1	1	DG8S197	2	INVSNP
1	1	0	0.391583	100	0.391583	0.391583	-1.14E-13	1	0	DG8S201	1	INVSNP
1	1	0	0.123417	100	0.123417	0.123417	-1.14E-13	1	0	DG8S201	2	INVSNP
1	1	0	0.123408	100	0.123408	0.123408	-1.14E-13	1	4	DG8S201	1	INVSNP
1	1	0	0.161592	100	0.161592	0.161592	-1.14E-13	1	4	DG8S201	2	INVSNP
1	1	0	0.165009	100	0.165009	0.165009	-1.14E-13	1	-2	DG8S201	1	INVSNP
1	1	0	0.009991	100	0.009991	0.009991	0	1	-2	DG8S201	2	INVSNP
1	1	0	0.025	100	0.025	0.025	-1.14E-13	1	2	DG8S201	2	INVSNP
1	1	0	0.644	125	0.644	0.644	0	1	0	DG8S212	1	INVSNP
1	1	0	0.338	125	0.338	0.338	0	1	0	DG8S212	2	INVSNP
1	1	0	0.02	125	0.02	0.02	0	1	2	DG8S212	2	INVSNP
0.999964	1	0	0.283213	86	0.283213	0.283214	2.05E-09	1	4	DG8S215	1	INVSNP
0.999964	1	0	0.33888	86	0.33888	0.338879	2.05E-09	1	4	DG8S215	2	INVSNP
0.999964	1	0	0.321438	86	0.321438	0.321437	2.05E-09	1	0	DG8S215	1	INVSNP
0.999964	1	0	0.058469	86	0.058469	0.05847	2.03E-09	1	0	DG8S215	2	INVSNP
1	1	0	0.137931	29	0.137931	0.137931	0	1	0	DG8S221	1	INVSNP
1	1	0	0.155172	29	0.155172	0.155172	0	1	0	DG8S221	2	INVSNP
1	1	0	0.362069	29	0.362069	0.362069	0	1	5	DG8S221	1	INVSNP
1	1	0	0.155172	29	0.155172	0.155172	0	1	-2	DG8S221	1	INVSNP
1	1	0	0.068986	29	0.068986	0.068986	0	1	7	DG8S221	2	INVSNP
1	1	0	0.034483	29	0.034483	0.034483	0	1	4	DG8S221	1	INVSNP
1	1	0	0.086207	29	0.086207	0.086207	0	1	4	DG8S221	2	INVSNP
0.999993	1	0	0.231682	120	0.231682	0.231682	7.94E-11	1	0	DG8S232	1	INVSNP
0.999993	1	0	0.089152	120	0.089152	0.089152	7.81E-11	1	0	DG8S232	2	INVSNP
0.999993	1	0	0.22712	120	0.22712	0.22712	7.17E-11	1	2	DG8S232	1	INVSNP
0.999993	1	0	0.152046	120	0.152046	0.152046	6.92E-11	1	2	DG8S232	2	INVSNP
0.999993	1	0	0.1375	120	0.1375	0.1375	8.00E-11	1	-8	DG8S232	1	INVSNP
0.999993	1	0	0.020319	120	0.020319	0.020319	7.48E-11	1	-4	DG8S232	1	INVSNP
0.999993	1	0	0.083847	120	0.083847	0.083847	7.99E-11	1	-4	DG8S232	2	INVSNP
0.999993	1	0	0.012545	120	0.012545	0.012545	7.97E-11	1	4	DG8S232	1	INVSNP
0.999993	1	0	0.016621	120	0.016621	0.016621	7.99E-11	1	4	DG8S232	2	INVSNP
0.999993	1	0	0.029167	120	0.029167	0.029167	8.00E-11	1	-2	DG8S232	1	INVSNP
1	1	0	0.547244	127	0.547244	0.547244	0	1	0	DG8S238	1	INVSNP
1	1	0	0.358268	127	0.358268	0.358268	0	1	0	DG8S238	2	INVSNP
1	1	0	0.094488	127	0.094488	0.094488	0	1	-8	DG8S238	1	INVSNP
1	1	0	0.577257	83	0.577257	0.577257	5.68E-14	1	4	DG8S242	1	INVSNP
1	1	0	0.085394	83	0.085394	0.085394	5.68E-14	1	4	DG8S242	2	INVSNP
1	1	0	0.079369	83	0.079369	0.079369	5.68E-14	1	0	DG8S242	1	INVSNP
1	1	0	0.25798	83	0.25798	0.25798	5.68E-14	1	0	DG8S242	2	INVSNP
0.999998	1	0	0.576849	81	0.576849	0.576849	7.62E-12	1	0	DG8S245	1	INVSNP
0.999998	1	0	0.305867	81	0.305867	0.305867	7.45E-12	1	0	DG8S245	2	INVSNP
0.999998	1	0	0.05249	81	0.05249	0.05249	8.20E-12	1	-4	DG8S245	1	INVSNP
0.999998	1	0	0.027757	81	0.027757	0.027757	4.49E-12	1	-4	DG8S245	2	INVSNP
0.999998	1	0	0.024982	81	0.024982	0.024982	7.84E-12	1	4	DG8S245	1	INVSNP
0.999998	1	0	0.012055	81	0.012055	0.012055	7.05E-12	1	4	DG8S245	2	INVSNP
0.999993	1	0	0.351139	125	0.351139	0.351139	8.16E-11	1	0	DG8S249	1	INVSNP
0.999993	1	0	0.256881	125	0.256881	0.256881	8.08E-11	1	0	DG8S249	2	INVSNP
0.999993	1	0	0.179888	125	0.179888	0.179888	7.98E-11	1	-19	DG8S249	1	INVSNP
0.999993	1	0	0.008112	125	0.008112	0.008112	7.74E-11	1	-19	DG8S249	2	INVSNP
0.999992	1	0	0.012	125	0.012	0.012	8.88E-11	1	-17	DG8S249	2	INVSNP
0.999992	1	0	0.016	125	0.016	0.016	8.86E-11	1	-21	DG8S249	1	INVSNP
0.999993	1	0	0.051345	125	0.051345	0.051345	8.80E-11	1	-2	DG8S249	1	INVSNP
0.999993	1	0	0.028655	125	0.028655	0.028655	8.75E-11	1	-2	DG8S249	2	INVSNP
0.999992	1	0	0.008	125	0.008	0.008	8.86E-11	1	6	DG8S249	2	INVSNP
0.999993	1	0	0.005628	125	0.005628	0.005628	8.82E-11	1	2	DG8S249	1	INVSNP
0.999992	1	0	0.018372	125	0.018372	0.018372	8.84E-11	1	2	DG8S249	2	INVSNP
0.999992	1	0	0.032	125	0.032	0.032	8.86E-11	1	-6	DG8S249	1	INVSNP
0.999992	1	0	0.008	125	0.008	0.008	8.88E-11	1	4	DG8S249	2	INVSNP
0.999992	1	0	0.024	125	0.024	0.024	8.86E-11	1	-4	DG8S249	2	INVSNP
0.999942	1	0	0.018288	91	0.018288	0.018288	5.27E-09	1	-10	DG8S250	1	INVSNP
0.999942	1	0	0.01468	91	0.01468	0.014679	5.25E-09	1	-10	DG8S250	2	INVSNP
0.999942	1	0	0.181834	91	0.181834	0.181834	5.26E-09	1	-4	DG8S250	1	INVSNP
0.999942	1	0	0.059924	91	0.059924	0.059925	5.26E-09	1	-4	DG8S250	2	INVSNP
0.999942	1	0	0.038825	91	0.038825	0.038825	5.26E-09	1	2	DG8S250	1	INVSNP
0.999942	1	0	0.054581	91	0.054581	0.054581	5.27E-09	1	2	DG8S250	2	INVSNP
0.999942	1	0	0.11064	91	0.11064	0.11064	5.26E-09	1	4	DG8S250	1	INVSNP
0.999942	1	0	0.098151	91	0.098151	0.098152	5.26E-09	1	4	DG8S250	2	INVSNP
0.999942	1	0	0.06147	91	0.06147	0.061471	5.26E-09	1	-2	DG8S250	1	INVSNP
0.999942	1	0	0.015453	91	0.015453	0.015452	5.25E-09	1	-2	DG8S250	2	INVSNP
0.999942	1	0	0.156164	91	0.156164	0.156163	5.24E-09	1	0	DG8S250	1	INVSNP
0.999942	1	0	0.074608	91	0.074608	0.074608	5.25E-09	1	0	DG8S250	2	INVSNP
0.999942	1	0	0.016484	91	0.016484	0.016484	5.28E-09	1	8	DG8S250	1	INVSNP

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0.999942	1	0	0.008919	91	0.008919	0.00892	5.28E-09	1	-8	DG8S250	1	INVSNP
0.999942	1	0	0.013059	91	0.013059	0.013058	5.27E-09	1	-8	DG8S250	2	INVSNP
0.999942	1	0	0.017268	91	0.017268	0.017266	5.27E-09	1	6	DG8S250	1	INVSNP
0.999942	1	0	0.015701	91	0.015701	0.015701	5.28E-09	1	6	DG8S250	2	INVSNP
0.999942	1	0	0.032967	91	0.032967	0.032967	5.28E-09	1	-12	DG8S250	2	INVSNP
0.999942	1	0	0.010989	91	0.010989	0.010989	5.28E-09	1	-8	DG8S250	1	INVSNP
0.999999	1	0	0.568546	122	0.568546	0.568546	1.71E-12	1	0	DG8S257	1	INVSNP
0.999999	1	0	0.091291	122	0.091291	0.091291	1.71E-12	1	0	DG8S257	2	INVSNP
0.999999	1	0	0.019977	122	0.019977	0.019977	9.09E-13	1	-6	DG8S257	1	INVSNP
0.999999	1	0	0.041499	122	0.041499	0.041499	1.36E-12	1	-6	DG8S257	2	INVSNP
0.999999	1	0	0.034429	122	0.034429	0.034429	1.02E-12	1	-2	DG8S257	1	INVSNP
0.999999	1	0	0.223768	122	0.223768	0.223768	1.71E-12	1	-2	DG8S257	2	INVSNP
0.999999	1	0	0.016393	122	0.016393	0.016393	1.82E-12	1	2	DG8S257	1	INVSNP
0.999999	1	0	0.004098	122	0.004098	0.004098	1.82E-12	1	-9	DG8S257	1	INVSNP
0.999998	1	0	0.041714	108	0.041714	0.041714	4.09E-12	1	15	DG8S258	1	INVSNP
0.999998	1	0	0.129582	108	0.129582	0.129582	8.48E-12	1	15	DG8S258	2	INVSNP
0.999998	1	0	0.342035	108	0.342035	0.342035	7.28E-12	1	18	DG8S258	1	INVSNP
0.999998	1	0	0.21815	108	0.21815	0.21815	6.82E-12	1	18	DG8S258	2	INVSNP
0.999998	1	0	0.237333	108	0.237333	0.237333	6.53E-12	1	12	DG8S258	1	INVSNP
0.999998	1	0	0.008037	108	0.008037	0.008037	6.82E-12	1	12	DG8S258	2	INVSNP
0.999998	1	0	0.00463	108	0.00463	0.00463	8.84E-12	1	24	DG8S258	1	INVSNP
0.999998	1	0	0.013177	108	0.013177	0.013177	8.19E-12	1	21	DG8S258	1	INVSNP
0.999998	1	0	0.005341	108	0.005341	0.005341	7.50E-12	1	21	DG8S258	2	INVSNP
1	1	0	0.61991	88	0.61991	0.61991	0	1	2	DG8S261	1	INVSNP
1	1	0	0.090318	88	0.090318	0.090318	0	1	2	DG8S261	2	INVSNP
1	1	0	0.050545	88	0.050545	0.050545	0	1	0	DG8S261	1	INVSNP
1	1	0	0.239228	88	0.239228	0.239228	0	1	0	DG8S261	2	INVSNP
0.999978	1	0	0.012168	103	0.012168	0.012168	7.74E-10	1	-4	DG8S262	1	INVSNP
0.999978	1	0	0.016959	103	0.016959	0.016959	7.62E-10	1	-4	DG8S262	2	INVSNP
0.999978	1	0	0.453984	103	0.453984	0.453983	7.52E-10	1	0	DG8S262	1	INVSNP
0.999978	1	0	0.128541	103	0.128541	0.128541	7.63E-10	1	0	DG8S262	2	INVSNP
0.999978	1	0	0.032523	103	0.032523	0.032523	7.74E-10	1	-10	DG8S262	1	INVSNP
0.999978	1	0	0.083982	103	0.083982	0.083982	7.74E-10	1	-10	DG8S262	2	INVSNP
0.999978	1	0	0.126793	103	0.126793	0.126794	7.71E-10	1	2	DG8S262	1	INVSNP
0.999978	1	0	0.047964	103	0.047964	0.047964	7.88E-10	1	2	DG8S262	2	INVSNP
0.999978	1	0	0.013543	103	0.013543	0.013544	7.84E-10	1	-2	DG8S262	1	INVSNP
0.999978	1	0	0.005874	103	0.005874	0.005874	7.65E-10	1	-2	DG8S262	2	INVSNP
0.999978	1	0	0.016328	103	0.016328	0.016328	7.62E-10	1	4	DG8S262	1	INVSNP
0.999978	1	0	0.046779	103	0.046779	0.046779	7.68E-10	1	4	DG8S262	2	INVSNP
0.999978	1	0	0.004854	103	0.004854	0.004854	7.74E-10	1	-14	DG8S262	2	INVSNP
0.999978	1	0	0.009709	103	0.009709	0.009709	7.74E-10	1	8	DG8S262	2	INVSNP
0.999995	1	0	0.03076	117	0.03076	0.03076	3.46E-11	1	15	DG8S265	1	INVSNP
0.999995	1	0	0.135907	117	0.135907	0.135907	4.41E-11	1	15	DG8S265	2	INVSNP
0.999995	1	0	0.349032	117	0.349032	0.349032	4.38E-11	1	18	DG8S265	1	INVSNP
0.999995	1	0	0.219345	117	0.219345	0.219345	4.25E-11	1	18	DG8S265	2	INVSNP
0.999995	1	0	0.227332	117	0.227332	0.227332	4.72E-11	1	12	DG8S265	1	INVSNP
0.999995	1	0	0.007711	117	0.007711	0.007711	4.65E-11	1	12	DG8S265	2	INVSNP
0.999995	1	0	0.012535	117	0.012535	0.012535	4.42E-11	1	21	DG8S265	1	INVSNP
0.999995	1	0	0.004559	117	0.004559	0.004559	3.80E-11	1	21	DG8S265	2	INVSNP
0.999994	1	0	0.012821	117	0.012821	0.012821	4.88E-11	1	-6	DG8S265	1	INVSNP
0.999987	1	0	0.199159	111	0.199159	0.199159	2.49E-10	1	-2	DG8S266	1	INVSNP
0.999987	1	0	0.21976	111	0.21976	0.21976	2.50E-10	1	-2	DG8S266	2	INVSNP
0.999987	1	0	0.396591	111	0.396591	0.396591	2.72E-10	1	0	DG8S266	1	INVSNP
0.999987	1	0	0.035842	111	0.035842	0.035842	2.63E-10	1	0	DG8S266	2	INVSNP
0.999987	1	0	0.034881	111	0.034881	0.034881	2.73E-10	1	-4	DG8S266	1	INVSNP
0.999987	1	0	0.113767	111	0.113767	0.113767	2.64E-10	1	-4	DG8S266	2	INVSNP
1	1	0	0.065626	114	0.065626	0.065626	1.14E-13	1	-4	DG8S269	1	INVSNP
1	1	0	0.320339	114	0.320339	0.320339	1.71E-13	1	-4	DG8S269	2	INVSNP
1	1	0	0.572488	114	0.572488	0.572488	1.14E-13	1	0	DG8S269	1	INVSNP
1	1	0	0.028389	114	0.028389	0.028389	-5.68E-14	1	0	DG8S269	2	INVSNP
1	1	0	0.002237	114	0.002237	0.002237	1.14E-13	1	-5	DG8S269	1	INVSNP
1	1	0	0.010921	114	0.010921	0.010921	0	1	-5	DG8S269	2	INVSNP
0.999995	1	0	0.258938	79	0.258938	0.258938	3.46E-11	1	-2	DG8S271	1	INVSNP
0.999995	1	0	0.051189	79	0.051189	0.051189	3.77E-11	1	-2	DG8S271	2	INVSNP
0.999995	1	0	0.330114	79	0.330114	0.330114	3.55E-11	1	0	DG8S271	1	INVSNP
0.999995	1	0	0.309127	79	0.309127	0.309127	3.52E-11	1	0	DG8S271	2	INVSNP
0.999994	1	0	0.018544	79	0.018544	0.018544	4.81E-11	1	2	DG8S271	1	INVSNP
0.999994	1	0	0.02576	79	0.02576	0.02576	4.81E-11	1	2	DG8S271	2	INVSNP
0.999994	1	0	0.006329	79	0.006329	0.006329	4.81E-11	1	4	DG8S271	2	INVSNP
0.999999	1	0	0.005376	93	0.005376	0.005376	1.51E-09	1	-8	DG8S277	1	INVSNP
0.999999	1	0	0.192029	93	0.192029	0.192029	1.50E-09	1	10	DG8S277	1	INVSNP
0.999999	1	0	0.039154	93	0.039154	0.039153	1.50E-09	1	10	DG8S277	2	INVSNP
0.999999	1	0	0.319108	93	0.319108	0.319108	1.51E-09	1	0	DG8S277	1	INVSNP
0.999999	1	0	0.008849	93	0.008849	0.008849	1.51E-09	1	0	DG8S277	2	INVSNP
0.999999	1	0	0.025918	93	0.025918	0.025918	1.50E-09	1	-2	DG8S277	1	INVSNP
0.999999	1	0	0.086985	93	0.086985	0.086985	1.49E-09	1	-2	DG8S277	2	INVSNP
0.999999	1	0	0.071375	93	0.071375	0.071375	1.51E-09	1	2	DG8S277	1	INVSNP
0.999999	1	0	0.165184	93	0.165184	0.165184	1.49E-09	1	2	DG8S277	2	INVSNP
0.999999	1	0	0.040712	93	0.040712	0.040712	1.50E-09	1	8	DG8S277	1	INVSNP
0.999999	1	0	0.007675	93	0.007675	0.007675	1.50E-09	1	8	DG8S277	2	INVSNP
0.999999	1	0	0.010753	93	0.010753	0.010753	1.51E-09	1	4	DG8S277	2	INVSNP
0.999999	1	0	0.005376	93	0.005376	0.005376	1.51E-09	1	-4	DG8S277	1	INVSNP
0.999999	1	0	0.005376	93	0.005376	0.005376	1.51E-09	1	6	DG8S277	2	INVSNP

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0.999969	1	0	0.012148	93	0.012148	0.012148	1.50E-09	1	12	DG8S277	1	INVSNP
0.999969	1	0	0.003981	93	0.003981	0.003982	1.50E-09	1	12	DG8S277	2	INVSNP
0.999985	1	0	0.429558	116	0.429558	0.429557	3.65E-10	1	0	DG8S285	1	INVSNP
0.999984	1	0	0.186823	116	0.186823	0.186823	3.96E-10	1	0	DG8S285	2	INVSNP
0.999984	1	0	0.158946	116	0.158946	0.158946	3.81E-10	1	2	DG8S285	1	INVSNP
0.999984	1	0	0.151399	116	0.151399	0.151399	3.81E-10	1	2	DG8S285	2	INVSNP
0.999984	1	0	0.045119	116	0.045119	0.045119	4.01E-10	1	1	DG8S285	1	INVSNP
0.999984	1	0	0.015226	116	0.015226	0.015226	3.88E-10	1	1	DG8S285	2	INVSNP
0.999984	1	0	0.012931	116	0.012931	0.012931	4.04E-10	1	-1	DG8S285	1	INVSNP
0.999999	1	0	0.436406	105	0.436406	0.436406	4.55E-13	1	0	DG8S291	1	INVSNP
0.999999	1	0	0.130261	105	0.130261	0.130261	5.68E-13	1	0	DG8S291	2	INVSNP
0.999999	1	0	0.052381	105	0.052381	0.052381	4.55E-13	1	-2	DG8S291	2	INVSNP
0.999999	1	0	0.123579	105	0.123579	0.123579	3.41E-13	1	4	DG8S291	1	INVSNP
0.999999	1	0	0.081183	105	0.081183	0.081183	4.55E-13	1	4	DG8S291	2	INVSNP
0.999999	1	0	0.063824	105	0.063824	0.063824	1.14E-13	1	2	DG8S291	1	INVSNP
0.999999	1	0	0.093319	105	0.093319	0.093319	1.14E-13	1	2	DG8S291	2	INVSNP
0.999999	1	0	0.019048	105	0.019048	0.019048	4.55E-13	1	6	DG8S291	2	INVSNP
0.999935	1	0	0.409193	124	0.409193	0.409194	6.55E-09	1	2	DG8S292	1	INVSNP
0.999936	1	0	0.308549	124	0.308549	0.308548	6.52E-09	1	2	DG8S292	2	INVSNP
0.999936	1	0	0.231938	124	0.231938	0.231935	6.53E-09	1	0	DG8S292	1	INVSNP
0.999936	1	0	0.050322	124	0.050322	0.050323	6.53E-09	1	0	DG8S292	2	INVSNP
0.999983	1	0	0.100223	111	0.100223	0.100223	4.49E-10	1	12	DG8S297	1	INVSNP
0.999983	1	0	0.115994	111	0.115994	0.115994	4.34E-10	1	12	DG8S297	2	INVSNP
0.999983	1	0	0.391988	111	0.391988	0.391988	4.46E-10	1	0	DG8S297	1	INVSNP
0.999983	1	0	0.026931	111	0.026931	0.026931	4.31E-10	1	0	DG8S297	2	INVSNP
0.999983	1	0	0.009139	111	0.009139	0.009139	4.34E-10	1	4	DG8S297	1	INVSNP
0.999983	1	0	0.094484	111	0.094484	0.094484	4.35E-10	1	4	DG8S297	2	INVSNP
0.999983	1	0	0.078894	111	0.078894	0.078894	4.46E-10	1	16	DG8S297	1	INVSNP
0.999983	1	0	0.020205	111	0.020205	0.020205	4.38E-10	1	16	DG8S297	2	INVSNP
0.999983	1	0	0.004515	111	0.004515	0.004515	4.33E-10	1	8	DG8S297	1	INVSNP
0.999983	1	0	0.018008	111	0.018008	0.018008	4.38E-10	1	8	DG8S297	2	INVSNP
0.999983	1	0	0.008503	111	0.008503	0.008503	4.49E-10	1	-4	DG8S297	1	INVSNP
0.999983	1	0	0.005011	111	0.005011	0.005011	4.46E-10	1	-4	DG8S297	2	INVSNP
0.999983	1	0	0.004837	111	0.004837	0.004837	4.49E-10	1	18	DG8S297	1	INVSNP
0.999983	1	0	0.004172	111	0.004172	0.004172	4.49E-10	1	18	DG8S297	2	INVSNP
0.999983	1	0	0.005589	111	0.005589	0.005589	4.41E-10	1	6	DG8S297	1	INVSNP
0.999983	1	0	0.016934	111	0.016934	0.016934	4.46E-10	1	6	DG8S297	2	INVSNP
0.999983	1	0	0.00472	111	0.00472	0.00472	4.49E-10	1	10	DG8S297	1	INVSNP
0.999983	1	0	0.026812	111	0.026812	0.026812	4.49E-10	1	10	DG8S297	2	INVSNP
0.999983	1	0	0.026729	111	0.026729	0.026729	4.39E-10	1	14	DG8S297	1	INVSNP
0.999983	1	0	0.03183	111	0.03183	0.03183	4.40E-10	1	14	DG8S297	2	INVSNP
0.999983	1	0	0.004505	111	0.004505	0.004505	4.49E-10	1	-2	DG8S297	1	INVSNP
0.999983	1	0	0.469828	116	0.469828	0.469828	0	1	0	DG8S298	1	INVSNP
0.999983	1	0	0.340517	116	0.340517	0.340517	0	1	0	DG8S298	2	INVSNP
0.999983	1	0	0.172414	116	0.172414	0.172414	0	1	2	DG8S298	1	INVSNP
0.999983	1	0	0.017241	116	0.017241	0.017241	0	1	1	DG8S298	1	INVSNP
0.999983	1	0	0.529405	117	0.529405	0.529404	6.31E-10	1	0	DG8S301	1	INVSNP
0.999983	1	0	0.26974	117	0.26974	0.26974	6.60E-10	1	0	DG8S301	2	INVSNP
0.999979	1	0	0.107347	117	0.107347	0.107348	6.65E-10	1	1	DG8S301	1	INVSNP
0.999979	1	0	0.093508	117	0.093508	0.093507	6.65E-10	1	1	DG8S301	2	INVSNP
0.999979	1	0	0.285622	117	0.285622	0.285622	1.14E-13	1	28	DG8S302	1	INVSNP
0.999979	1	0	0.120361	117	0.120361	0.120361	1.14E-13	1	26	DG8S302	2	INVSNP
0.999979	1	0	0.141026	117	0.141026	0.141026	0	1	24	DG8S302	1	INVSNP
0.999979	1	0	0.09472	117	0.09472	0.09472	-2.27E-13	1	28	DG8S302	1	INVSNP
0.999979	1	0	0.174511	117	0.174511	0.174511	1.14E-13	1	28	DG8S302	2	INVSNP
0.999979	1	0	0.051282	117	0.051282	0.051282	0	1	30	DG8S302	2	INVSNP
0.999979	1	0	0.132479	117	0.132479	0.132479	0	1	0	DG8S302	1	INVSNP
0.999995	1	0	0.41528	125	0.41528	0.41528	3.34E-11	1	2	DG8S303	1	INVSNP
0.999995	1	0	0.30072	125	0.30072	0.30072	3.19E-11	1	2	DG8S303	2	INVSNP
0.999995	1	0	0.004	125	0.004	0.004	4.27E-11	1	4	DG8S303	1	INVSNP
0.999995	1	0	0.23272	125	0.23272	0.23272	3.02E-11	1	-2	DG8S303	1	INVSNP
0.999995	1	0	0.04728	125	0.04728	0.04728	3.87E-11	1	-2	DG8S303	2	INVSNP
0.999973	1	0	0.097119	56	0.097119	0.097119	1.14E-09	1	0	DG8S307	1	INVSNP
0.999973	1	0	0.081453	56	0.081453	0.081453	1.14E-09	1	0	DG8S307	2	INVSNP
0.999973	1	0	0.478121	56	0.478121	0.478121	1.11E-09	1	4	DG8S307	1	INVSNP
0.999973	1	0	0.182593	56	0.182593	0.182594	1.14E-09	1	4	DG8S307	2	INVSNP
0.999973	1	0	0.07067	56	0.07067	0.07067	1.14E-09	1	-4	DG8S307	1	INVSNP
0.999973	1	0	0.018616	56	0.018616	0.018616	1.14E-09	1	-4	DG8S307	2	INVSNP
0.999973	1	0	0.041591	56	0.041591	0.041591	1.14E-09	1	8	DG8S307	1	INVSNP
0.999973	1	0	0.029838	56	0.029838	0.029838	1.14E-09	1	8	DG8S307	2	INVSNP
0.999995	1	0	0.397395	102	0.397395	0.397395	3.68E-11	1	0	DG8S308	1	INVSNP
0.999995	1	0	0.21535	102	0.21535	0.21535	3.08E-11	1	0	DG8S308	2	INVSNP
0.999995	1	0	0.122939	102	0.122939	0.122939	3.81E-11	1	2	DG8S308	1	INVSNP
0.999995	1	0	0.063335	102	0.063335	0.063335	3.09E-11	1	2	DG8S308	2	INVSNP
0.999994	1	0	0.040007	102	0.040007	0.040007	5.12E-11	1	-14	DG8S308	1	INVSNP
0.999994	1	0	0.067836	102	0.067836	0.067836	5.24E-11	1	-14	DG8S308	2	INVSNP
0.999994	1	0	0.027894	102	0.027894	0.027894	5.39E-11	1	-4	DG8S308	1	INVSNP
0.999994	1	0	0.011321	102	0.011321	0.011321	5.29E-11	1	-4	DG8S308	2	INVSNP
0.999994	1	0	0.029412	102	0.029412	0.029412	5.51E-11	1	-8	DG8S308	1	INVSNP
0.999994	1	0	0.004902	102	0.004902	0.004902	5.51E-11	1	-2	DG8S308	2	INVSNP
0.999994	1	0	0.019608	102	0.019608	0.019608	5.51E-11	1	4	DG8S308	1	INVSNP
0.999994	1	0	0.010753	93	0.010753	0.010753	2.27E-13	1	8	DG8S316	1	INVSNP
0.999994	1	0	0.341125	93	0.341125	0.341125	1.14E-13	1	10	DG8S316	1	INVSNP

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1	1	0	0.008338	93	0.008338	0.008338	0	1	10	DG8S316	2	INVSNP
1	1	0	0.090976	93	0.090976	0.090976	-1.14E-13	1	0	DG8S316	1	INVSNP
1	1	0	0.274616	93	0.274616	0.274616	2.27E-13	1	0	DG8S316	2	INVSNP
1	1	0	0.07174	93	0.07174	0.07174	-1.14E-13	1	12	DG8S316	1	INVSNP
1	1	0	0.019658	93	0.019658	0.019658	0	1	12	DG8S316	2	INVSNP
1	1	0	0.125192	93	0.125192	0.125192	1.14E-13	1	14	DG8S316	1	INVSNP
1	1	0	0.036098	93	0.036098	0.036098	0	1	14	DG8S316	2	INVSNP
1	1	0	0.021505	93	0.021505	0.021505	2.27E-13	1	16	DG8S316	1	INVSNP
1	1	0	0.358222	96	0.358222	0.358222	0	1	2	DG8S322	1	INVSNP
1	1	0	0.094903	96	0.094903	0.094903	0	1	2	DG8S322	2	INVSNP
1	1	0	0.015625	96	0.015625	0.015625	0	1	10	DG8S322	1	INVSNP
1	1	0	0.063653	96	0.063653	0.063653	-1.14E-13	1	0	DG8S322	1	INVSNP
1	1	0	0.259263	96	0.259263	0.259263	1.14E-13	1	0	DG8S322	2	INVSNP
1	1	0	0.145833	96	0.145833	0.145833	0	1	4	DG8S322	1	INVSNP
1	1	0	0.0625	96	0.0625	0.0625	0	1	6	DG8S322	1	INVSNP
0.999954	1	0	0.427397	100	0.427397	0.427398	3.30E-09	1	0	DG8S323	1	INVSNP
0.999954	1	0	0.262604	100	0.262604	0.262602	3.34E-09	1	0	DG8S323	2	INVSNP
0.999954	1	0	0.252603	100	0.252603	0.252602	3.30E-09	1	5	DG8S323	1	INVSNP
0.999954	1	0	0.057397	100	0.057397	0.057398	3.32E-09	1	5	DG8S323	2	INVSNP
0.998918	1	0	0.115522	104	0.115522	0.115523	1.84E-06	1	0	DG8S324	1	INVSNP
0.998918	1	0	0.19217	104	0.19217	0.192169	1.84E-06	1	0	DG8S324	2	INVSNP
0.998918	1	0	0.009615	104	0.009615	0.009615	1.84E-06	1	10	DG8S324	2	INVSNP
0.998918	1	0	0.093568	104	0.093568	0.093568	1.84E-06	1	8	DG8S324	1	INVSNP
0.998918	1	0	0.098722	104	0.098722	0.098722	1.84E-06	1	8	DG8S324	2	INVSNP
0.998918	1	0	0.096154	104	0.096154	0.096154	1.84E-06	1	6	DG8S324	1	INVSNP
0.998918	1	0	0.124015	104	0.124015	0.124008	1.84E-06	1	4	DG8S324	1	INVSNP
0.998918	1	0	0.000985	104	0.000985	0.000992	1.84E-06	1	4	DG8S324	2	INVSNP
0.998918	1	0	0.238992	104	0.238992	0.238998	1.84E-06	1	2	DG8S324	1	INVSNP
0.998918	1	0	0.011008	104	0.011008	0.011002	1.84E-06	1	2	DG8S324	2	INVSNP
0.998918	1	0	0.019231	104	0.019231	0.019231	1.84E-06	1	12	DG8S324	2	INVSNP
0.999689	1	0	0.127469	111	0.127469	0.127469	1.52E-07	1	-4	DG8S332	1	INVSNP
0.999689	1	0	0.052711	111	0.052711	0.052711	1.52E-07	1	-4	DG8S332	2	INVSNP
0.999689	1	0	0.050778	111	0.050778	0.050779	1.52E-07	1	4	DG8S332	1	INVSNP
0.999689	1	0	0.030303	111	0.030303	0.030303	1.52E-07	1	4	DG8S332	2	INVSNP
0.999689	1	0	0.105005	111	0.105005	0.105003	1.52E-07	1	2	DG8S332	1	INVSNP
0.999689	1	0	0.106707	111	0.106707	0.106708	1.52E-07	1	2	DG8S332	2	INVSNP
0.999689	1	0	0.185972	111	0.185972	0.18597	1.52E-07	1	-2	DG8S332	1	INVSNP
0.999689	1	0	0.034749	111	0.034749	0.034751	1.52E-07	1	-2	DG8S332	2	INVSNP
0.999689	1	0	0.114825	111	0.114825	0.114825	1.52E-07	1	0	DG8S332	1	INVSNP
0.999689	1	0	0.137427	111	0.137427	0.137427	1.52E-07	1	0	DG8S332	2	INVSNP
0.999689	1	0	0.017069	111	0.017069	0.017069	1.52E-07	1	-8	DG8S332	1	INVSNP
0.999689	1	0	0.005454	111	0.005454	0.005454	1.52E-07	1	-6	DG8S332	2	INVSNP
0.999689	1	0	0.029513	111	0.029513	0.029518	1.52E-07	1	6	DG8S332	1	INVSNP
0.999689	1	0	0.002018	111	0.002018	0.002016	1.53E-07	1	6	DG8S332	2	INVSNP
0.999997	1	0	0.282444	101	0.282444	0.282444	1.27E-11	1	-5	DG8S333	1	INVSNP
0.999997	1	0	0.024487	101	0.024487	0.024487	1.53E-12	1	-5	DG8S333	2	INVSNP
0.999997	1	0	0.366071	101	0.366071	0.366071	1.30E-11	1	0	DG8S333	1	INVSNP
0.999997	1	0	0.326998	101	0.326998	0.326998	1.30E-11	1	0	DG8S333	2	INVSNP
0.999993	1	0	0.354923	125	0.354923	0.354923	6.87E-11	1	1	SG08S100	1	INVSNP
0.999993	1	0	0.065077	125	0.065077	0.065078	8.66E-11	1	1	SG08S100	2	INVSNP
0.999994	1	0	0.285077	125	0.285077	0.285077	6.69E-11	1	2	SG08S100	1	INVSNP
0.999993	1	0	0.294923	125	0.294923	0.294923	6.66E-11	1	2	SG08S100	2	INVSNP
0.999998	1	0	0.508186	119	0.508186	0.508186	1.71E-12	1	1	SG08S102	1	INVSNP
1	1	0	0.025427	119	0.025427	0.025427	3.41E-13	1	1	SG08S102	2	INVSNP
0.999999	1	0	0.155679	119	0.155679	0.155679	1.53E-12	1	2	SG08S102	1	INVSNP
0.999999	1	0	0.310707	119	0.310707	0.310707	1.65E-12	1	2	SG08S102	2	INVSNP
0.999998	1	0	0.501608	123	0.501608	0.501607	2.49E-09	1	0	SG08S112	1	INVSNP
0.999998	1	0	0.209774	123	0.209774	0.209775	2.48E-09	1	0	SG08S112	2	INVSNP
0.999998	1	0	0.152864	123	0.152864	0.152865	2.49E-09	1	2	SG08S112	1	INVSNP
0.999998	1	0	0.135754	123	0.135754	0.135753	2.49E-09	1	2	SG08S112	2	INVSNP
1	1	0	0.667195	124	0.667195	0.667195	0	1	0	SG08S120	1	INVSNP
1	1	0	0.053773	124	0.053773	0.053773	0	1	0	SG08S120	2	INVSNP
1	1	0	0.094096	124	0.094096	0.094096	0	1	2	SG08S120	1	INVSNP
1	1	0	0.284937	124	0.284937	0.284937	0	1	2	SG08S120	2	INVSNP
0.999997	1	0	0.608234	122	0.608234	0.608234	9.89E-12	1	0	SG08S138	1	INVSNP
0.999998	1	0	0.137668	122	0.137668	0.137668	8.41E-12	1	0	SG08S138	2	INVSNP
0.999999	1	0	0.039307	122	0.039307	0.039307	3.01E-12	1	2	SG08S138	1	INVSNP
0.999998	1	0	0.214791	122	0.214791	0.214791	9.27E-12	1	2	SG08S138	2	INVSNP
0.999999	1	0	0.524172	126	0.524172	0.524172	1.36E-12	1	0	SG08S15	1	INVSNP
0.999999	1	0	0.055194	126	0.055194	0.055194	4.55E-13	1	0	SG08S15	2	INVSNP
0.999999	1	0	0.126622	126	0.126622	0.126622	1.14E-12	1	2	SG08S15	1	INVSNP
0.999999	1	0	0.294013	126	0.294013	0.294013	1.25E-12	1	2	SG08S15	2	INVSNP
0.999998	1	0	0.10833	124	0.10833	0.10833	6.03E-12	1	0	SG08S26	1	INVSNP
0.999998	1	0	0.294896	124	0.294896	0.294898	7.96E-12	1	0	SG08S26	2	INVSNP
0.999998	1	0	0.540864	124	0.540864	0.540864	8.30E-12	1	2	SG08S26	1	INVSNP
0.999999	1	0	0.055911	124	0.055911	0.055911	3.41E-12	1	2	SG08S26	2	INVSNP
0.999999	1	0	0.111247	124	0.111247	0.111247	2.18E-12	1	2	SG08S27	1	INVSNP
0.999999	1	0	0.296011	124	0.296011	0.296011	2.81E-12	1	2	SG08S27	2	INVSNP
0.999999	1	0	0.546011	124	0.546011	0.546011	2.81E-12	1	1	SG08S27	1	INVSNP
0.999999	1	0	0.046731	124	0.046731	0.046731	1.02E-12	1	1	SG08S27	2	INVSNP
0.999999	1	0	0.585373	125	0.585373	0.585373	5.12E-13	1	1	SG08S32	1	INVSNP
0.999999	1	0	0.078627	125	0.078627	0.078627	3.98E-13	1	1	SG08S32	2	INVSNP
1	1	0	0.070627	125	0.070627	0.070627	2.84E-13	1	0	SG08S32	1	INVSNP

FIG. 11B10





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0.999946	1	0	0.285705	130	0.265705	0.265707	4.63E-09	1	1	SG08S93	2	INVSNP
0.999946	1	0	0.088782	130	0.088782	0.088784	4.63E-09	1	2	SG08S93	1	INVSNP
0.999946	1	0	0.088141	130	0.088141	0.088139	4.63E-09	1	2	SG08S93	2	INVSNP
0.999936	1	0	0.316819	112	0.316819	0.316819	6.35E-09	1	0	SG08S94	1	INVSNP
0.999936	1	0	0.009074	112	0.009074	0.009074	6.34E-09	1	0	SG08S94	2	INVSNP
0.999936	1	0	0.357288	112	0.357288	0.357289	6.35E-09	1	2	SG08S94	1	INVSNP
0.999936	1	0	0.316819	112	0.316819	0.316819	6.35E-09	1	2	SG08S94	2	INVSNP
1	1	0	0.061731	101	0.061731	0.061731	5.68E-14	1	2	SG08S95	1	INVSNP
1	1	0	0.304606	101	0.304606	0.304606	5.68E-14	1	2	SG08S95	2	INVSNP
1	1	0	0.601636	101	0.601636	0.601636	1.14E-13	1	3	SG08S95	1	INVSNP
1	1	0	0.032028	101	0.032028	0.032028	5.68E-14	1	3	SG08S95	2	INVSNP
0.99999	1	0	0.261511	114	0.261511	0.261511	1.46E-10	1	2	SG08S96	1	INVSNP
0.99999	1	0	0.277963	114	0.277963	0.277963	1.47E-10	1	2	SG08S96	2	INVSNP
0.99999	1	0	0.396384	114	0.396384	0.396384	1.57E-10	1	3	SG08S96	1	INVSNP
0.999991	1	0	0.084142	114	0.084142	0.084142	1.38E-10	1	3	SG08S96	2	INVSNP
0.999912	1	0	0.595743	129	0.595743	0.595742	1.21E-08	1	0	SG08S97	1	INVSNP
0.999912	1	0	0.311233	129	0.311233	0.311235	1.21E-08	1	0	SG08S97	2	INVSNP
0.999912	1	0	0.051543	129	0.051543	0.051545	1.21E-08	1	1	SG08S97	1	INVSNP
0.999912	1	0	0.04148	129	0.04148	0.041478	1.21E-08	1	1	SG08S97	2	INVSNP

FIG. 11B12

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Appendix 3: Output for association of markers to panic disorder.

P-Value	Relative Risk	Number of Affecteds	Frequency in Affecteds	Number of Controls	Frequency in Controls	Frequency under Null Hypothesis	Chi-square Statistic	Information	Allele	Marker
0.355059	0.910282	286	0.636364	811	0.65783	0.652233	0.855293	1	4	AC022239-5
0.242105	1.1394	286	0.265734	811	0.24106	0.247493	1.3683	1	0	AC022239-5
0.571632	0.902632	286	0.075175	811	0.082614	0.080875	0.319959	1	8	AC022239-5
0.986197	0.992388	286	0.012238	811	0.012331	0.012308	0.000299	1	-4	AC022239-5
0.240092	2.03452	286	0.008741	811	0.004316	0.005469	1.38005	1	-8	AC022239-5
0.980871	0.945128	286	0.001748	811	0.00185	0.001823	0.002407	1	-12	AC022239-5
0.783017	1.05089	228	0.107456	574	0.102787	0.104115	0.075839	1	12	AC068974-2
0.56987	1.07163	228	0.298248	574	0.283972	0.28803	0.3229	1	14	AC068974-2
0.105873	0.833881	228	0.399123	574	0.44338	0.430798	2.61776	1	0	AC068974-2
0.868142	0.954783	228	0.041667	574	0.043554	0.043018	0.028413	1	16	AC068974-2
0.912008	1.03403	228	0.035088	574	0.033972	0.034289	0.012212	1	6	AC068974-2
0.348408	1.22425	228	0.076754	574	0.083589	0.067332	0.879248	1	10	AC068974-2
0.539288	0.627754	228	0.004386	574	0.006989	0.006234	0.376881	1	20	AC068974-2
0.206899	1.75787	228	0.019737	574	0.011324	0.013716	1.5925	1	8	AC068974-2
0.413329	2.87E-10	228	2.50E-13	574	0.000871	0.000823	0.689206	1	15	AC068974-2
0.229492	2.11012	228	0.010965	574	0.005226	0.006858	1.44401	1	18	AC068974-2
0.189771	5.05286	228	0.004386	574	0.000871	0.00187	1.88497	1	2	AC068974-2
0.156357	1.38E-18	228	3.55E-19	574	0.002613	0.00187	2.00911	1	-2	AC068974-2
0.112637	18882.8	228	0.002193	574	1.16E-07	0.000623	2.51683	1	-4	AC068974-2
0.413329	2.87E-10	228	2.50E-13	574	0.000871	0.000823	0.689206	1	13	AC068974-2
0.010328	1.39401	272	0.202208	780	0.153848	0.16635	8.57788	1	0	AF131215-1
0.002527	0.719595	272	0.270221	780	0.338744	0.321768	9.12075	1	2	AF131215-1
0.621042	1.05433	272	0.321691	780	0.310256	0.313213	0.244405	1	-2	AF131215-1
0.401243	0.771187	272	0.023897	780	0.030769	0.028992	0.704598	1	22	AF131215-1
0.397708	1.33952	272	0.023897	780	0.017949	0.018487	0.715251	1	-4	AF131215-1
0.345895	1.24806	272	0.051471	780	0.041667	0.044202	0.889198	1	8	AF131215-1
0.543576	0.870997	272	0.047794	780	0.054487	0.052757	0.368952	1	4	AF131215-1
0.743728	1.14925	272	0.014708	780	0.012821	0.013308	0.108877	1	-6	AF131215-1
0.682444	1.11131	272	0.040441	780	0.036539	0.037548	0.167387	1	10	AF131215-1
0.465938	2.87107	272	0.001838	780	0.000841	0.000951	0.531592	1	6	AF131215-1
0.089948	23085.8	272	0.001838	780	7.88E-08	0.000475	2.70641	1	14	AF131215-1
0.273866	1.28E-11	272	1.65E-14	780	0.001282	0.000951	1.19728	1	12	AF131215-1
0.008381	0.771846	283	0.469965	780	0.534615	0.517404	6.95029	1	0	AF131215-2
0.010287	1.28932	283	0.462898	780	0.400641	0.417215	6.68444	1	4	AF131215-2
0.919253	0.978776	283	0.056537	780	0.057692	0.057385	0.010277	1	8	AF131215-2
0.981089	1.03375	283	0.0053	780	0.005128	0.005174	0.002379	1	-4	AF131215-2
0.223033	2.76553	283	0.0053	780	0.001923	0.002822	1.48475	1	-8	AF131215-2
0.002887	0.743738	292	0.359589	795	0.430189	0.411224	8.87765	1	0	AF131215-4
0.00029	1.4211	292	0.523973	795	0.436478	0.459982	13.134	1	14	AF131215-4
0.323378	0.832763	292	0.068493	795	0.081132	0.077737	0.975234	1	12	AF131215-4
0.626764	0.86546	292	0.025685	795	0.02956	0.028519	0.236475	1	8	AF131215-4
0.80931	0.90625	292	0.013699	795	0.015094	0.014719	0.058234	1	16	AF131215-4
0.387167	1.8207	292	0.006849	795	0.003774	0.0046	0.81323	1	18	AF131215-4
0.553357	0.543741	292	0.001712	795	0.003145	0.00276	0.351338	1	10	AF131215-4
0.428886	1.17E-11	292	7.34E-15	795	0.000829	0.00046	0.625839	1	4	AF131215-4
0.278978	1.2284	291	0.075801	801	0.062422	0.065934	1.17207	1	-6	AF188029-1
0.549532	0.940847	291	0.333333	801	0.347066	0.343407	0.358156	1	0	AF188029-1
0.83298	0.941483	291	0.175258	801	0.184145	0.181777	0.228069	1	-8	AF188029-1
0.325299	1.12325	291	0.221649	801	0.202247	0.207418	0.987521	1	-4	AF188029-1
0.693252	0.897679	291	0.030928	801	0.034332	0.033425	0.155588	1	2	AF188029-1
0.501099	0.815477	291	0.024055	801	0.029338	0.02793	0.452608	1	-12	AF188029-1
0.430539	0.866162	291	0.072165	801	0.082397	0.07967	0.62137	1	-2	AF188029-1
0.292817	1.25018	291	0.060138	801	0.048689	0.05174	1.10863	1	-10	AF188029-1
0.431056	4.83E-13	291	3.02E-16	801	0.000624	0.000458	0.619977	1	6	AF188029-1
0.66378	0.784972	291	0.006873	801	0.008739	0.008242	0.188965	1	4	AF188029-1
0.841551	1.01992	284	0.429577	804	0.424751	0.426011	0.039964	1	0	AF188029-10
0.490415	0.93353	284	0.390846	804	0.407338	0.403033	0.475615	1	2	AF188029-10
0.192955	0.737804	284	0.040493	804	0.054105	0.050552	1.89491	1	8	AF188029-10
0.275572	1.21229	284	0.089789	804	0.075249	0.079044	1.1888	1	4	AF188029-10
0.442342	1.20876	284	0.044014	804	0.038892	0.038603	0.5902	1	-2	AF188029-10
0.110811	4.26372	284	0.005282	804	0.001244	0.002298	2.64547	1	-4	AF188029-10
0.436617	1.50E-13	284	9.32E-17	804	0.000622	0.00046	0.605157	1	6	AF188029-10
0.678161	0.947682	286	0.187832	795	0.175472	0.173451	0.172203	1	0	AF188029-12
0.827278	0.983654	286	0.078671	795	0.079874	0.078558	0.00833	1	4	AF188029-12
0.842897	1.01971	286	0.566434	795	0.581835	0.582905	0.03938	1	-12	AF188029-12
0.521834	1.08748	286	0.171329	795	0.159748	0.162812	0.410268	1	-4	AF188029-12
0.333271	0.398047	286	0.001748	795	0.004403	0.0037	0.936147	1	12	AF188029-12
0.277654	0.644248	286	0.012238	795	0.018868	0.017114	1.17654	1	8	AF188029-12

FIG. 11C1











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0.898924	0.856879	273	0.001832	468	0.002137	0.002024	0.016134	1	-8	DG8S245
0.806011	0.971318	184	0.5625	882	0.569648	0.568129	0.060308	1	0	DG8S249
0.087761	0.74417	184	0.141304	882	0.181085	0.172633	3.33645	1	-19	DG8S249
0.218722	1.62861	184	0.027174	882	0.016862	0.019053	1.51274	1	-17	DG8S249
0.262401	0.525638	184	0.008152	882	0.015396	0.013857	1.25605	1	-21	DG8S249
0.186759	1.27882	184	0.122283	882	0.098241	0.103349	1.743	1	-2	DG8S249
0.180892	0.306894	184	0.002717	882	0.008798	0.007508	1.79028	1	6	DG8S249
0.274525	1.33859	184	0.057085	882	0.043255	0.046189	1.19399	1	2	DG8S249
0.000877	2.37E-14	184	4.06E-16	882	0.016862	0.013279	11.0706	1	-6	DG8S249
0.474337	0.651249	184	0.008152	882	0.012463	0.011547	0.511855	1	4	DG8S249
0.006519	2.09302	184	0.065217	882	0.032258	0.039281	7.40092	1	-4	DG8S249
0.067139	1.43E-12	184	7.38E-15	882	0.005132	0.004042	3.35163	1	-1	DG8S249
0.012747	33521.7	184	0.005434	882	1.63E-07	0.001155	6.20393	1	-8	DG8S249
0.876085	1.03605	287	0.054007	584	0.052226	0.052813	0.024316	1	-10	DG8S250
0.059451	0.793205	287	0.203833	584	0.244007	0.230789	3.55263	1	-4	DG8S250
0.777552	1.04347	287	0.134146	584	0.129281	0.130884	0.079812	1	2	DG8S250
0.671776	1.05605	287	0.198606	584	0.190068	0.192882	0.179532	1	4	DG8S250
0.793481	0.946321	287	0.060976	584	0.064212	0.063146	0.068535	1	-2	DG8S250
0.937633	0.99083	287	0.249129	584	0.250858	0.250287	0.006122	1	0	DG8S250
0.260349	1.67546	287	0.016679	584	0.009418	0.011481	1.2669	1	8	DG8S250
0.056123	2.24587	287	0.020906	584	0.009418	0.013203	3.6484	1	-8	DG8S250
0.527266	1.24457	287	0.02439	584	0.018692	0.02124	0.399658	1	6	DG8S250
0.457081	1.36288	287	0.017422	584	0.012843	0.014351	0.553034	1	-12	DG8S250
0.478395	1.32285	287	0.019164	584	0.014555	0.018074	0.502519	1	-6	DG8S250
0.519284	0.507857	287	0.001742	584	0.003425	0.00287	0.415316	1	12	DG8S250
0.025242	0.794875	280	0.576788	680	0.631618	0.615625	5.00719	1	0	DG8S257
0.824495	1.05493	280	0.048429	680	0.044118	0.044792	0.049181	1	-6	DG8S257
0.053394	1.22755	280	0.358929	680	0.313235	0.326582	3.73154	1	-2	DG8S257
0.781377	0.86615	280	0.008929	680	0.010294	0.008896	0.077021	1	2	DG8S257
0.005737	12.2433	280	0.008929	680	0.000735	0.003125	7.63113	1	-9	DG8S257
0.197364	1.17988	251	0.227092	637	0.199372	0.207207	1.68177	1	15	DG8S258
0.783805	0.971373	251	0.543825	637	0.55102	0.548986	0.075275	1	18	DG8S258
0.398308	1.43534	251	0.017928	637	0.012559	0.014077	0.713434	1	0	DG8S258
0.27797	0.866985	251	0.191235	637	0.214286	0.20777	1.17699	1	12	DG8S258
0.248859	2.47E-13	251	3.88E-16	637	0.00157	0.001126	1.3297	1	24	DG8S258
0.405954	0.706504	251	0.013944	637	0.019623	0.018018	0.69062	1	21	DG8S258
0.139196	3.82363	251	0.005976	637	0.00157	0.002815	2.18682	1	33	DG8S258
0.511547	1.09839	155	0.725806	549	0.70674	0.710938	0.430901	1	2	DG8S261
0.442148	0.895729	155	0.270968	549	0.29326	0.288352	0.590707	1	0	DG8S261
0.081789	28913.2	155	0.003225	549	1.12E-07	0.00071	3.02898	1	-2	DG8S261
0.917373	1.03678	149	0.036913	561	0.035651	0.035918	0.010763	1	-4	DG8S262
0.937128	0.989756	149	0.526846	561	0.529412	0.528873	0.008222	1	0	DG8S262
0.167011	1.3457	149	0.114094	561	0.087344	0.092958	1.90957	1	-10	DG8S262
0.507263	1.10801	149	0.238255	561	0.220143	0.223944	0.43971	1	2	DG8S262
0.138593	0.541764	149	0.020134	561	0.036542	0.033099	2.21593	1	-2	DG8S262
0.459657	0.80888	149	0.050336	561	0.061497	0.059155	0.54673	1	4	DG8S262
0.426938	0.62373	149	0.010067	561	0.016043	0.014789	0.631137	1	6	DG8S262
0.231698	0.340068	149	0.003356	561	0.009804	0.008451	1.4304	1	-14	DG8S262
0.169501	1.20E-12	149	4.29E-15	561	0.003565	0.002817	1.88735	1	8	DG8S262
0.139116	1.19325	292	0.224315	751	0.195073	0.20326	2.18771	1	15	DG8S265
0.25268	0.894052	292	0.530822	751	0.558589	0.550815	1.30843	1	18	DG8S265
0.194727	1.63747	292	0.020548	751	0.01285	0.014881	1.68149	1	0	DG8S265
0.897742	0.954193	292	0.202055	751	0.20972	0.207574	0.160831	1	12	DG8S265
0.485853	0.758744	292	0.013899	751	0.017978	0.016779	0.485697	1	21	DG8S265
0.04906	5.17242	292	0.006849	751	0.001332	0.002876	3.8733	1	33	DG8S265
0.289948	0.366333	292	0.001712	751	0.00468	0.003835	1.11986	1	-6	DG8S265
0.089333	1.19793	256	0.501953	615	0.456911	0.470149	2.94146	1	-2	DG8S266
0.119002	0.846488	256	0.394531	615	0.434959	0.423077	2.4304	1	0	DG8S266
0.775754	0.952397	256	0.103518	615	0.10813	0.106774	0.081143	1	-4	DG8S266
0.174019	1.14617	284	0.424296	741	0.391393	0.400488	1.84797	1	-4	DG8S269
0.017797	0.790452	284	0.522887	741	0.580972	0.564878	5.61801	1	0	DG8S269
0.007424	1.95983	284	0.052817	741	0.027665	0.034634	7.16744	1	-5	DG8S269
0.207753	0.855855	224	0.272321	567	0.304233	0.295198	1.58701	1	-2	DG8S271
0.155673	1.17828	224	0.645089	567	0.606702	0.617573	2.01576	1	0	DG8S271
0.76238	0.941163	224	0.082589	567	0.087302	0.085967	0.09142	1	2	DG8S271
0.248316	1.27E-11	224	2.24E-14	567	0.001764	0.001264	1.33275	1	4	DG8S271
0.08048	2.08801	276	0.019928	674	0.009644	0.012632	3.05518	1	-6	DG8S271
0.613804	1.05848	276	0.28442	674	0.272997	0.276316	0.254673	1	10	DG8S277
0.16432	0.853054	276	0.253623	674	0.284868	0.275789	1.93401	1	0	DG8S277
0.289898	0.809775	276	0.063406	674	0.077151	0.073158	1.1201	1	-2	DG8S277
0.170558	1.17101	276	0.273551	674	0.243323	0.252105	1.87803	1	2	DG8S277
0.892018	1.02996	276	0.057971	674	0.05838	0.056842	0.018428	1	8	DG8S277
0.039967	0.32938	276	0.005435	674	0.018321	0.013158	4.21927	1	4	DG8S277
0.404461	0.541014	276	0.003623	674	0.006677	0.005788	0.695024	1	-4	DG8S277
0.300118	1.53598	276	0.018116	674	0.011869	0.013684	1.07357	1	6	DG8S277
0.906912	0.95484	276	0.016304	674	0.017062	0.016842	0.013674	1	12	DG8S277
0.97755	0.976729	276	0.003623	674	0.003709	0.003684	0.000792	1	14	DG8S277
0.074801	0.825761	254	0.543307	578	0.690278	0.575904	3.17439	1	0	DG8S285
0.13877	1.18065	254	0.380238	578	0.322917	0.334337	2.19154	1	2	DG8S285
0.887651	1.08508	254	0.076772	578	0.071181	0.072892	0.16164	1	1	DG8S285
0.559354	1.26506	254	0.019885	576	0.015625	0.016868	0.340825	1	-1	DG8S285
0.356384	1.11184	239	0.633891	500	0.609	0.61705	0.850596	1	0	DG8S291

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0.162405	0.655564	239	0.028289	500	0.044	0.039242	1.95169	1	-2	DG8S291
0.664214	0.94411	239	0.223849	500	0.234	0.230717	0.188445	1	4	DG8S291
0.976872	0.994705	239	0.10251	500	0.103	0.102842	0.00084	1	2	DG8S291
0.934355	1.04651	239	0.01046	500	0.01	0.010149	0.006784	1	6	DG8S291
0.836583	1.06313	185	0.724324	729	0.711934	0.714442	0.223238	1	2	DG8S282
0.636583	0.940619	185	0.275676	729	0.288066	0.285558	0.223238	1	0	DG8S292
0.93628	1.00923	280	0.25	727	0.248281	0.248759	0.008391	1	12	DG8S297
0.403305	0.915914	280	0.330357	727	0.350069	0.344588	0.69845	1	0	DG8S297
0.656559	1.06702	280	0.1375	727	0.129986	0.132075	0.19773	1	4	DG8S297
0.20533	0.81757	280	0.101788	727	0.121733	0.118187	1.60405	1	18	DG8S297
0.028116	2.06626	280	0.032143	727	0.015819	0.020358	4.94835	1	8	DG8S297
0.171493	2.03235	280	0.0125	727	0.00619	0.007944	1.86985	1	-4	DG8S297
0.756145	1.11522	280	0.021429	727	0.016257	0.019861	0.096439	1	18	DG8S297
0.02801	0.35351	280	0.007143	727	0.019945	0.016385	4.82744	1	6	DG8S297
0.841176	1.14454	280	0.032143	727	0.028198	0.029295	0.217208	1	10	DG8S297
0.380383	1.21198	280	0.064286	727	0.053645	0.056804	0.836558	1	14	DG8S297
0.507417	2.59929	280	0.001788	727	0.000688	0.000993	0.439391	1	2	DG8S297
0.518055	1.44844	280	0.008929	727	0.00619	0.006951	0.417764	1	-2	DG8S297
0.003918	1.51581	258	0.871094	726	0.818804	0.830957	8.32244	1	0	DG8S298
0.003878	0.652947	258	0.121094	726	0.174242	0.160387	8.34019	1	2	DG8S298
0.808617	0.871595	258	0.007813	726	0.008953	0.008656	0.058666	1	1	DG8S298
0.441209	0.903605	265	0.798113	602	0.813953	0.809112	0.593136	1	0	DG8S301
0.441209	1.10688	265	0.201887	602	0.186047	0.180888	0.593136	1	1	DG8S301
0.641908	1.05256	247	0.356275	666	0.344595	0.347755	0.216255	1	26	DG8S302
0.890881	1.02213	247	0.125508	666	0.123123	0.123788	0.018821	1	24	DG8S302
0.395509	1.09979	247	0.340081	666	0.319069	0.324754	0.721937	1	28	DG8S302
0.855019	0.958143	247	0.052632	666	0.054805	0.054217	0.033386	1	30	DG8S302
0.075343	0.762485	247	0.125508	666	0.158408	0.149507	3.18281	1	0	DG8S302
0.52425	0.930767	287	0.740418	756	0.753968	0.75024	0.405524	1	2	DG8S303
0.861317	1.12959	287	0.005226	756	0.00463	0.004794	0.030519	1	4	DG8S303
0.519333	1.07584	287	0.254355	756	0.240741	0.244487	0.415218	1	-2	DG8S303
0.422334	1.92E-14	287	1.27E-17	756	0.000681	0.000479	0.643812	1	0	DG8S303
0.828891	1.06	60	0.166667	315	0.15873	0.16	0.046821	1	0	DG8S307
0.993008	1.00192	60	0.708333	315	0.707937	0.708	7.68E-05	1	4	DG8S307
0.41298	1.30254	60	0.116667	315	0.092084	0.096	0.670264	1	-4	DG8S307
0.036339	0.195216	60	0.008333	315	0.04127	0.036	4.28994	1	8	DG8S307
0.174508	0.867749	268	0.597015	689	0.630624	0.621212	1.84378	1	0	DG8S308
0.152562	1.20791	268	0.19403	689	0.166183	0.173981	2.04644	1	2	DG8S308
0.976251	0.994712	268	0.089552	689	0.089986	0.089864	0.000886	1	-14	DG8S308
0.352781	1.21652	268	0.067164	689	0.055878	0.059039	0.86343	1	-4	DG8S308
0.46913	0.781059	268	0.020522	689	0.026125	0.024556	0.524025	1	-6	DG8S308
0.541584	1.29032	268	0.016791	689	0.013062	0.014107	0.372611	1	-2	DG8S308
0.622344	0.819999	268	0.014925	689	0.018142	0.017241	0.242587	1	4	DG8S308
0.338258	1.69655	293	0.010239	660	0.006061	0.007345	0.917023	1	8	DG8S316
0.626009	0.949049	293	0.305461	660	0.316667	0.313221	0.237511	1	10	DG8S316
0.158291	1.15119	293	0.46587	660	0.431081	0.441763	1.99048	1	0	DG8S316
0.879686	0.976132	293	0.107509	660	0.109848	0.109129	0.022912	1	12	DG8S316
0.119081	0.771131	293	0.088737	660	0.112121	0.104932	2.42936	1	14	DG8S316
0.580561	0.807973	293	0.015358	660	0.018939	0.017838	0.305329	1	16	DG8S316
0.689952	1.28915	293	0.006826	660	0.005303	0.005771	0.159137	1	2	DG8S316
0.710688	1.04144	241	0.414938	606	0.405116	0.40791	0.13761	1	2	DG8S322
0.595587	0.852836	241	0.03112	606	0.036304	0.034829	0.281703	1	10	DG8S322
0.355476	1.10787	241	0.392116	606	0.367987	0.374852	0.863813	1	0	DG8S322
0.511816	0.895057	241	0.109959	606	0.121287	0.118064	0.430354	1	4	DG8S322
0.178024	0.734605	241	0.051887	606	0.069307	0.064345	1.81404	1	6	DG8S322
0.907702	1.01284	297	0.726956	700	0.726429	0.727182	0.013442	1	0	DG8S323
0.907702	0.987325	297	0.271044	700	0.273571	0.272818	0.013442	1	5	DG8S323
0.349639	1.10583	285	0.319298	695	0.297842	0.304082	0.874767	1	0	DG8S324
0.977007	0.990462	285	0.022807	695	0.023022	0.022959	0.000831	1	10	DG8S324
0.443804	1.0948	285	0.236842	695	0.220863	0.22551	0.566942	1	8	DG8S324
0.057369	0.72887	285	0.087719	695	0.116547	0.108163	3.61186	1	8	DG8S324
0.81871	0.965635	285	0.119298	695	0.123022	0.121939	0.052534	1	4	DG8S324
0.974544	0.996016	285	0.198491	695	0.197122	0.198939	0.001018	1	2	DG8S324
0.560044	0.809524	285	0.017544	695	0.021583	0.020408	0.339627	1	12	DG8S324
0.985668	0.997367	279	0.132616	726	0.13292	0.132836	0.000323	1	-4	DG8S332
0.26551	0.798167	279	0.05914	726	0.073003	0.069154	1.2398	1	4	DG8S332
0.102733	0.824595	279	0.218846	726	0.251377	0.241791	2.6626	1	2	DG8S332
0.01251	0.734721	279	0.184588	726	0.235537	0.221393	6.2371	1	-2	DG8S332
0.00022	1.49355	279	0.340502	726	0.256887	0.2801	13.6552	1	0	DG8S332
0.312897	1.41148	279	0.02509	726	0.017908	0.018901	1.01841	1	-6	DG8S332
0.340492	1.28515	279	0.041219	726	0.032369	0.034826	0.808577	1	6	DG8S332
0.138081	0.837115	260	0.257692	539	0.289135	0.281602	2.19922	1	-5	DG8S333
0.138081	1.19458	260	0.742308	539	0.708865	0.718398	2.19922	1	0	DG8S333
0.128081	0.859129	295	0.377968	764	0.414267	0.404155	2.34011	1	1	SG08S100
0.128081	1.16397	295	0.822034	764	0.585733	0.595845	2.34011	1	2	SG08S100
0.002054	0.711664	295	0.398305	387	0.481912	0.445748	9.50073	1	1	SG08S102
0.002054	1.40516	295	0.601695	387	0.518088	0.554252	9.50073	1	2	SG08S102
0.065066	0.810575	297	0.621212	390	0.669231	0.648472	3.4033	1	0	SG08S112
0.065066	1.23389	297	0.378788	390	0.330769	0.351528	3.4033	1	2	SG08S112
0.028331	0.806452	297	0.5	700	0.553571	0.537613	4.8078	1	0	SG08S120
0.028331	1.24	297	0.5	700	0.448429	0.462387	4.8078	1	2	SG08S120
0.143127	0.852151	293	0.711804	746	0.743298	0.73436	2.14401	1	0	SG08S138

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0.143127	1.1735	293	0.288398	746	0.258702	0.26564	2.14401	1	2	SG08S138
0.006102	0.784033	295	0.498305	713	0.565217	0.545635	7.51987	1	0	SG08S15
0.008102	1.30884	295	0.501695	713	0.434783	0.454365	7.51987	1	2	SG08S15
0.033807	1.23132	297	0.503367	701	0.451498	0.466934	4.50445	1	0	SG08S26
0.033807	0.812135	297	0.498833	701	0.548502	0.533068	4.50445	1	2	SG08S26
0.024806	1.27723	294	0.506803	397	0.445844	0.471178	5.03735	1	2	SG08S27
0.024806	0.782947	294	0.493197	397	0.554156	0.52822	5.03735	1	1	SG08S27
0.150121	0.852391	295	0.581358	397	0.819647	0.803324	2.07102	1	1	SG08S32
0.150121	1.17317	295	0.418644	397	0.380353	0.398678	2.07102	1	0	SG08S32
0.087347	1.20817	292	0.636986	618	0.592233	0.606593	3.34653	1	1	SG08S35
0.067347	0.827701	292	0.363014	618	0.407767	0.393407	3.34653	1	2	SG08S35
0.014737	0.777004	294	0.435374	523	0.498088	0.47552	5.94763	1	1	SG08S39
0.014737	1.28699	294	0.584626	523	0.501912	0.52448	5.94763	1	0	SG08S39
0.353952	0.909915	294	0.363948	689	0.388067	0.379451	0.85924	1	0	SG08S42
0.353952	1.099	294	0.636054	689	0.813933	0.620549	0.85924	1	2	SG08S42
0.824719	0.983618	295	0.098305	610	0.101639	0.100552	0.049054	1	1	SG08S48
0.824719	1.03775	295	0.901695	610	0.898361	0.899448	0.049054	1	3	SG08S48
0.00032	0.701393	291	0.517182	743	0.604307	0.579787	12.9497	1	0	SG08S5
0.00032	1.42574	291	0.482818	743	0.395693	0.420213	12.9497	1	2	SG08S5
0.219811	0.88411	290	0.408621	685	0.438686	0.429744	1.50691	1	2	SG08S50
0.219811	1.13108	290	0.591379	685	0.561314	0.570256	1.50691	1	0	SG08S50
0.004498	0.73126	292	0.469178	381	0.547244	0.513373	8.07093	1	0	SG08S508
0.004498	1.3675	292	0.530822	381	0.452756	0.486627	8.07093	1	2	SG08S508
0.021168	0.765893	294	0.304422	396	0.363636	0.338408	5.31288	1	2	SG08S507
0.021168	1.30567	294	0.695578	396	0.636364	0.681594	5.31288	1	3	SG08S507
0.001044	0.692023	290	0.353448	392	0.441327	0.403959	10.7479	1	1	SG08S508
0.001044	1.44504	290	0.646552	392	0.558673	0.596041	10.7479	1	3	SG08S508
0.804879	1.07435	282	0.801418	371	0.789757	0.794793	0.2677	1	1	SG08S510
0.804879	0.930792	282	0.198582	371	0.210243	0.205207	0.2677	1	0	SG08S510
0.238703	1.14198	291	0.439863	362	0.407459	0.421899	1.38824	1	1	SG08S511
0.238703	0.875674	291	0.560137	362	0.592541	0.578101	1.38824	1	3	SG08S511
0.117631	1.18967	292	0.441781	388	0.399486	0.417647	2.44858	1	2	SG08S512
0.117631	0.84057	292	0.558219	388	0.800515	0.582353	2.44858	1	1	SG08S512
0.00892	0.749774	295	0.4	392	0.470863	0.44032	6.83873	1	1	SG08S517
0.00892	1.33373	295	0.6	392	0.529337	0.55968	6.83873	1	3	SG08S517
0.000365	1.49072	292	0.65411	397	0.559194	0.599419	12.701	1	1	SG08S520
0.000365	0.670815	292	0.34589	397	0.440806	0.400581	12.701	1	0	SG08S520
0.199841	0.856692	294	0.697279	391	0.7289	0.715328	1.64354	1	2	SG08S6
0.199841	1.16728	294	0.302721	391	0.2711	0.284672	1.64354	1	0	SG08S6
0.003309	0.721047	285	0.422807	380	0.503947	0.469173	8.62898	1	1	SG08S70
0.003309	1.38687	285	0.577193	380	0.498053	0.530827	8.62898	1	3	SG08S70
4.32E-05	1.49537	295	0.605085	740	0.506081	0.5343	16.7266	1	0	SG08S71
4.32E-05	0.668732	295	0.394915	740	0.493919	0.4657	16.7266	1	2	SG08S71
0.000207	0.662887	292	0.412671	378	0.51455	0.470149	13.7681	1	3	SG08S73
0.000207	1.60855	292	0.587329	378	0.48545	0.529851	13.7681	1	1	SG08S73
0.195671	0.867883	293	0.44198	394	0.477157	0.462154	1.87439	1	1	SG08S78
0.195671	1.15223	293	0.55802	394	0.522843	0.537848	1.87439	1	2	SG08S78
0.91286	0.988164	296	0.508448	394	0.511421	0.510145	0.011975	1	0	SG08S90
0.91286	1.01198	296	0.491554	394	0.488579	0.489855	0.011975	1	1	SG08S90
0.007751	0.726157	297	0.765993	705	0.81844	0.802894	7.09002	1	1	SG08S93
0.007751	1.37711	297	0.234007	705	0.18158	0.197106	7.09002	1	2	SG08S93
0.639646	0.94514	275	0.321818	362	0.334254	0.328885	0.219205	1	0	SG08S94
0.639646	1.05804	275	0.678182	362	0.665746	0.671115	0.219205	1	2	SG08S94
0.000601	1.41718	294	0.496599	586	0.41041	0.439205	11.7742	1	2	SG08S95
0.000601	0.705628	294	0.503401	586	0.58959	0.580795	11.7742	1	3	SG08S95
0.132106	1.16662	295	0.816949	613	0.579935	0.59198	2.26758	1	2	SG08S96
0.132106	0.857175	295	0.383051	613	0.420065	0.40804	2.26758	1	3	SG08S96
0.878948	0.978023	299	0.894849	713	0.896914	0.896245	0.023196	1	0	SG08S97
0.878948	1.02457	299	0.105351	713	0.103088	0.103755	0.023196	1	1	SG08S97

FIG. 11C8

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Appendix 3: Output of association with bipolar disorder.

P-value	Relative Risk	Number of Affecteds	Frequency in Affecteds	Number of Controls	Frequency in Controls	Frequency under Null Hypothesis	Chi-square Statistic	Information	Allele	Marker
0.636132	0.927223	96	0.640625	811	0.657783	0.656009	0.223837	1	4	AC022239-5
0.227291	1.23196	96	0.28125	811	0.24106	0.245314	1.45774	1	0	AC022239-5
0.316779	0.740298	96	0.0625	811	0.0826141	0.080485	1.0022	1	8	AC022239-5
0.814911	0.843158	96	0.010417	811	0.0123305	0.012128	0.054801	1	-4	AC022239-5
0.863298	1.20792	96	0.005208	811	0.0043157	0.00441	0.029845	1	-8	AC022239-5
0.412413	2.12E-12	96	3.83E-16	811	0.0018496	0.001854	0.871834	1	-12	AC022239-5
0.160568	1.41548	86	0.139535	574	0.102787	0.107578	1.96887	1	12	AC068974-2
0.421391	1.15389	86	0.313954	574	0.283972	0.287879	0.848434	1	14	AC068974-2
0.23462	0.82084	86	0.395349	574	0.44338	0.437121	1.41263	1	0	AC068974-2
0.860978	1.07122	86	0.046512	574	0.043554	0.043939	0.03067	1	16	AC068974-2
0.440332	0.677047	86	0.023258	574	0.0339721	0.032576	0.595417	1	8	AC068974-2
0.367219	0.718343	86	0.046512	574	0.0635888	0.061364	0.813054	1	10	AC068974-2
0.134389	2.25E-14	86	1.58E-16	574	0.0069686	0.006081	2.24108	1	20	AC068974-2
0.477172	0.51057	86	0.005814	574	0.011324	0.010608	0.505319	1	8	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.0008711	0.000758	0.279334	1	15	AC068974-2
0.116188	3.37871	86	0.017442	574	0.0052265	0.008818	2.46797	1	18	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.0008711	0.000758	0.279334	1	2	AC068974-2
0.518787	2.23196	86	0.005814	574	0.0026132	0.00303	0.418305	1	-2	AC068974-2
0.043377	6.4445.2	86	0.005813	574	9.07E-08	0.000758	4.08064	1	-4	AC068974-2
0.597138	5.66E-11	86	4.94E-14	574	0.0008711	0.000758	0.279334	1	13	AC068974-2
0.754266	0.933961	93	0.145161	780	0.153846	0.152921	0.097981	1	0	AF131215-1
0.224689	0.81593	93	0.295899	780	0.339744	0.335052	1.47417	1	2	AF131215-1
0.846815	1.0328	93	0.317204	780	0.310258	0.310997	0.03732	1	-2	AF131215-1
0.462742	0.692307	93	0.021505	780	0.0307692	0.029782	0.539254	1	22	AF131215-1
0.100567	2.13967	93	0.037635	780	0.0179487	0.020046	2.69654	1	-4	AF131215-1
0.673039	1.16949	93	0.048387	780	0.0416867	0.042383	0.178068	1	8	AF131215-1
0.794508	1.09078	93	0.05914	780	0.0544872	0.054983	0.06784	1	4	AF131215-1
0.716817	1.26229	93	0.016129	780	0.0128205	0.013173	0.131758	1	-6	AF131215-1
0.271308	1.49621	93	0.053764	780	0.0365385	0.038373	1.21012	1	10	AF131215-1
0.634992	6.50E-10	93	4.17E-13	780	0.000641	0.000573	0.225352	1	6	AF131215-1
0.034229	62457	93	0.005376	780	8.65E-08	0.000573	4.48322	1	14	AF131215-1
0.501936	1.77E-12	93	2.28E-15	780	0.0012821	0.001145	0.45084	1	12	AF131215-1
0.187336	0.81879	98	0.484694	780	0.534616	0.529043	1.73844	1	0	AF131215-2
0.162999	1.24434	98	0.454082	780	0.400841	0.406608	2.04209	1	4	AF131215-2
0.699807	0.878137	98	0.051021	780	0.0576923	0.056948	0.148673	1	8	AF131215-2
0.416268	2.00001	98	0.010204	780	0.0051282	0.005695	0.660829	1	-4	AF131215-2
0.399181	1.69E-12	98	3.26E-15	780	0.0019231	0.001708	0.710761	1	-8	AF131215-2
0.244447	0.834808	97	0.388598	795	0.430189	0.425448	1.35476	1	0	AF131215-4
0.018541	1.4314	97	0.525773	795	0.438478	0.448188	5.54432	1	14	AF131215-4
0.462884	0.81344	97	0.06701	795	0.0811321	0.079598	0.492344	1	12	AF131215-4
0.017526	0.170104	97	0.005165	795	0.0295587	0.026908	6.64289	1	8	AF131215-4
0.988347	1.02487	97	0.015484	795	0.0150943	0.015135	0.001575	1	16	AF131215-4
0.239428	5.16E-12	97	1.96E-14	795	0.0037738	0.003363	1.38396	1	18	AF131215-4
0.282932	6.68E-13	97	2.74E-15	795	0.0031447	0.002803	1.15295	1	10	AF131215-4
0.631289	5.34E-10	97	3.36E-13	795	0.0006289	0.000561	0.230316	1	4	AF131215-4
0.282669	1.36545	98	0.083333	801	0.062422	0.08468	1.15421	1	-8	AF188029-1
0.268777	0.834559	98	0.307292	801	0.347066	0.342809	1.22298	1	0	AF188029-1
0.549289	0.886101	98	0.166667	801	0.184145	0.182274	0.358593	1	-8	AF188029-1
0.584626	1.10444	98	0.21875	801	0.202247	0.204013	0.283178	1	-4	AF188029-1
0.821729	0.907332	98	0.03125	801	0.0343321	0.034002	0.05077	1	2	AF188029-1
0.239275	0.525159	98	0.015625	801	0.0293383	0.027871	1.38486	1	-12	AF188029-1
0.31984	1.29493	98	0.104167	801	0.082397	0.084727	0.990419	1	-2	AF188029-1
0.171693	1.53673	98	0.072917	801	0.0486891	0.051282	1.8881	1	-10	AF188029-1
0.834164	4.00E-10	98	2.50E-13	801	0.0006242	0.000557	0.226457	1	6	AF188029-1
0.074425	7.89E-12	98	7.05E-14	801	0.0087391	0.007804	3.18262	1	4	AF188029-1
0.857216	1.02828	95	0.431679	804	0.424751	0.425473	0.032371	1	0	AF188029-10
0.44934	0.887774	95	0.378947	804	0.407338	0.404338	0.572316	1	2	AF188029-10
0.691359	0.869309	95	0.047368	804	0.0541045	0.053393	0.157618	1	8	AF188029-10
0.244804	1.38547	95	0.1	804	0.0752488	0.077864	1.35271	1	4	AF188029-10
0.714284	1.15403	95	0.042105	804	0.0369915	0.037264	0.134035	1	-2	AF188029-10
0.503764	4.00E-10	95	4.98E-13	804	0.0012438	0.001112	0.446998	1	-4	AF188029-10
0.636436	5.51E-10	95	3.43E-13	804	0.0008219	0.000558	0.223433	1	6	AF188029-10
0.717884	1.07492	94	0.18617	795	0.175472	0.176603	0.130723	1	0	AF188029-12
0.793631	0.826871	94	0.074468	795	0.0798742	0.079303	0.068434	1	4	AF188029-12
0.634645	1.07691	94	0.579787	795	0.561635	0.563555	0.225814	1	-12	AF188029-12
0.438125	0.844172	94	0.138298	795	0.159748	0.15748	0.601188	1	-4	AF188029-12
0.862499	1.20931	94	0.005319	795	0.0044025	0.004499	0.029996	1	12	AF188029-12
0.775155	0.843242	94	0.015967	795	0.0188679	0.01656	0.08159	1	8	AF188029-12

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0.196727	0.82086	97	0.536083	809	0.584672	0.57947	1.68851	1	0	AF188029-7
0.248882	1.19447	97	0.43299	809	0.389988	0.394592	1.32901	1	-4	AF188029-7
0.552933	1.47921	97	0.015464	809	0.0105068	0.011038	0.35209	1	2	AF188029-7
0.53362	0.55371	97	0.005155	809	0.0092707	0.00883	0.387493	1	-2	AF188029-7
0.191893	3.36041	97	0.010309	809	0.0030902	0.003863	1.70302	1	4	AF188029-7
0.340916	1.01E-10	97	2.51E-13	809	0.0024722	0.002208	0.906983	1	6	AF188029-7
0.639475	1.09324	63	0.5	449	0.477728	0.480469	0.218429	1	0	AF287957-1
0.067242	0.692098	63	0.309524	449	0.393096	0.382812	3.34908	1	-6	AF287957-1
0.025708	3.04845	63	0.055556	449	0.0189309	0.023438	4.97556	1	4	AF287957-1
0.880581	1.06508	63	0.055556	449	0.0523385	0.052734	0.02257	1	-4	AF287957-1
0.475142	1.51682	63	0.031746	449	0.0211581	0.022461	0.509994	1	2	AF287957-1
0.423074	1.60292	63	0.031746	449	0.0200445	0.021484	0.641761	1	-2	AF287957-1
0.945167	0.949461	63	0.015873	449	0.0167038	0.016602	0.00473	1	-14	AF287957-1
0.11589	1.67752	100	0.065	867	0.0397824	0.042399	2.472	1	-12	D8S1130
0.868953	0.993269	100	0.245	867	0.246251	0.246122	0.001515	1	4	D8S1130
0.215318	0.78042	100	0.155	867	0.190311	0.18866	1.53532	1	0	D8S1130
0.873375	0.991546	100	0.095	867	0.0957324	0.095657	0.001114	1	8	D8S1130
0.818831	1.04133	100	0.235	867	0.227797	0.228542	0.052464	1	-8	D8S1130
0.720807	0.927687	100	0.145	867	0.154556	0.153568	0.127721	1	-4	D8S1130
0.441571	1.33774	100	0.045	867	0.0340254	0.03518	0.592198	1	12	D8S1130
0.978816	1.0202	100	0.01	867	0.0098039	0.009824	0.000705	1	16	D8S1130
0.418155	4.07E-12	100	7.05E-15	867	0.0017301	0.001551	0.655494	1	2	D8S1130
0.033067	78563.9	100	0.004899	867	8.32E-08	0.000517	4.54233	1	20	D8S1130
0.837578	1.03489	99	0.282828	839	0.275924	0.276652	0.042022	1	0	D8S1469
0.909489	1.01727	99	0.489697	839	0.465435	0.465885	0.012924	1	4	D8S1469
0.405936	1.18419	99	0.171717	839	0.148987	0.151388	0.69067	1	8	D8S1469
0.704869	1.27538	99	0.015152	839	0.011919	0.01226	0.143456	1	12	D8S1469
0.237766	0.657424	99	0.040404	839	0.0601907	0.058102	1.39379	1	3	D8S1469
0.20717	0.546582	99	0.020202	839	0.0363528	0.034848	1.5911	1	-4	D8S1469
0.504045	1.40E-12	99	1.87E-15	839	0.0011919	0.001066	0.448409	1	7	D8S1469
0.20041	0.81685	90	0.422222	845	0.472189	0.46738	1.63938	1	0	D8S1695
0.666936	0.921986	90	0.216667	845	0.230769	0.229412	0.185207	1	8	D8S1695
0.007851	2.01962	90	0.122222	845	0.064497	0.070054	7.06711	1	8	D8S1695
0.891445	1.04602	90	0.081111	845	0.0585799	0.058824	0.018628	1	10	D8S1695
0.67357	0.899543	90	0.105556	845	0.115976	0.114973	0.177455	1	4	D8S1695
0.167585	1.7815	90	0.044445	845	0.0254438	0.027273	1.9046	1	12	D8S1695
0.835889	1.04419	90	0.022222	845	0.0213018	0.02139	0.008511	1	2	D8S1695
0.968082	1.04345	90	0.005556	845	0.0053254	0.005348	0.001601	1	14	D8S1695
0.233447	3.37E-13	90	1.40E-15	845	0.004142	0.003743	1.41974	1	16	D8S1695
0.524484	4.71E-13	90	5.58E-18	845	0.0011834	0.00107	0.405068	1	-4	D8S1695
0.652729	1.90E-10	90	1.12E-13	845	0.0005917	0.000535	0.202477	1	9	D8S1695
0.348847	0.840511	96	0.213542	643	0.244168	0.240189	0.878374	1	34	D8S1721
0.152584	0.50491	96	0.020833	643	0.0404355	0.037889	2.04823	1	36	D8S1721
0.916389	1.01665	96	0.411458	643	0.407465	0.407984	0.011021	1	0	D8S1721
0.785034	0.937834	96	0.119792	643	0.12675	0.125848	0.074401	1	2	D8S1721
0.064966	1.54723	96	0.140625	643	0.0956454	0.101488	3.40584	1	4	D8S1721
0.565421	0.666315	96	0.010417	643	0.0155521	0.014885	0.330405	1	8	D8S1721
0.084188	1.79531	96	0.087708	643	0.0388802	0.042825	2.98213	1	24	D8S1721
0.807385	0.835523	96	0.010417	643	0.0124417	0.012179	0.059439	1	32	D8S1721
0.479937	0.512687	96	0.005208	643	0.0101089	0.009472	0.499008	1	38	D8S1721
0.23772	1.71E-12	96	6.69E-15	643	0.003888	0.003383	1.39406	1	26	D8S1721
0.597747	4.11E-11	96	3.20E-14	643	0.0007776	0.000677	0.278407	1	6	D8S1721
0.597747	4.11E-11	96	3.20E-14	643	0.0007776	0.000677	0.278407	1	-4	D8S1721
0.360592	8.65E-12	96	2.02E-14	643	0.0023328	0.00203	0.83583	1	30	D8S1721
0.697747	4.11E-11	96	3.20E-14	643	0.0007776	0.000677	0.278407	1	-2	D8S1721
0.142602	0.801487	101	0.564356	866	0.617783	0.612203	2.14965	1	0	D8S1759
0.397877	0.793563	101	0.074258	866	0.0918014	0.089969	0.714734	1	2	D8S1759
0.466242	1.40237	101	0.029703	866	0.0213628	0.022234	0.530869	1	6	D8S1759
0.07637	1.82526	101	0.094059	866	0.0600462	0.063599	3.1405	1	4	D8S1759
0.357415	1.22571	101	0.138814	866	0.116051	0.118407	0.848955	1	12	D8S1759
0.33652	1.34288	101	0.069307	866	0.0525404	0.054292	0.923645	1	10	D8S1759
0.544338	0.858155	101	0.009901	866	0.0150116	0.014478	0.367562	1	14	D8S1759
0.504658	0.533584	101	0.004951	866	0.0092379	0.00879	0.445127	1	16	D8S1759
0.862661	1.02935	101	0.014852	866	0.0144342	0.014478	0.002192	1	8	D8S1759
0.415705	4.59E-12	101	7.96E-15	866	0.0017321	0.001551	0.662425	1	-2	D8S1759
0.373568	1.18012	63	0.5	702	0.458689	0.462092	0.791763	1	0	D8S1825
0.322396	0.685215	63	0.055556	702	0.0790598	0.077124	0.9792	1	8	D8S1825
0.593823	1.15537	63	0.142857	702	0.126068	0.127451	0.284413	1	10	D8S1825
0.093314	0.648083	63	0.134921	702	0.193732	0.188889	2.81625	1	6	D8S1825
0.495342	1.216	63	0.126984	702	0.106838	0.108497	0.484902	1	2	D8S1825
0.680675	1.58657	63	0.007938	702	0.0049858	0.005229	0.169367	1	-2	D8S1825
0.25365	1.96863	63	0.031746	702	0.0163818	0.017847	1.30309	1	4	D8S1825
0.353489	1.48E-11	63	5.28E-14	702	0.0035613	0.003268	0.860884	1	-1	D8S1825
0.119951	4.40E-11	63	4.43E-13	702	0.0099715	0.00915	2.41798	1	12	D8S1825
0.67839	1.14E-11	63	8.13E-15	702	0.0007123	0.000854	0.171944	1	14	D8S1825
0.317308	1.18665	79	0.398734	841	0.358502	0.361957	1.00001	1	4	D8S265
0.11628	1.40175	79	0.202532	841	0.153389	0.157609	2.467	1	0	D8S265
0.019755	2.24E-11	79	4.07E-13	841	0.0178359	0.016304	5.4334	1	6	D8S265
0.265927	0.686837	79	0.058962	841	0.0808561	0.078804	1.23784	1	-5	D8S265
0.260573	0.757916	79	0.120253	841	0.152794	0.15	1.26571	1	2	D8S265
0.672194	0.877854	79	0.075949	841	0.0856124	0.084783	0.179047	1	18	D8S265
0.767312	1.12702	79	0.050633	841	0.0451843	0.045652	0.095489	1	12	D8S265

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0.790552	1.07922	79	0.094937	841	0.088585	0.08913	0.07054	1	14	D8S265
0.871704	2.16E-10	79	1.29E-13	841	0.0005945	0.000543	0.179615	1	-3	D8S265
0.079875	2.92E-12	79	2.98E-14	841	0.010107	0.009239	3.06744	1	16	D8S265
0.343023	3.46E-12	79	1.03E-14	841	0.0029727	0.002717	0.899099	1	8	D8S265
0.462784	1.45E-12	79	2.60E-15	841	0.0017838	0.00183	0.538152	1	10	D8S265
0.871704	2.16E-10	79	1.29E-13	841	0.0005945	0.000543	0.179615	1	20	D8S265
0.871704	2.16E-10	79	1.29E-13	841	0.0005945	0.000543	0.179615	1	1	D8S265
0.871704	2.16E-10	79	1.29E-13	841	0.0005945	0.000543	0.179615	1	-4	D8S265
0.700978	1.12837	84	0.101562	762	0.0912074	0.09201	0.147457	1	0	D8S351
0.160378	1.35485	84	0.257812	762	0.204068	0.208232	1.97068	1	18	D8S351
0.140811	1.36696	84	0.273438	762	0.215879	0.220339	2.17126	1	2	D8S351
0.0828	0.610815	84	0.101563	762	0.156168	0.151937	3.00908	1	6	D8S351
0.087491	1.42E-11	84	1.70E-13	762	0.011811	0.010898	2.81993	1	10	D8S351
0.329101	0.689311	84	0.054687	762	0.0774278	0.075688	0.952431	1	8	D8S351
0.714128	0.844368	84	0.039083	762	0.0459318	0.0454	0.134188	1	20	D8S351
0.475253	0.758494	84	0.054688	762	0.0708661	0.069813	0.509735	1	4	D8S351
0.627473	1.18309	84	0.101563	762	0.0885827	0.089588	0.235503	1	16	D8S351
0.230432	0.355762	84	0.007812	762	0.0216535	0.020581	1.43819	1	14	D8S351
0.132055	1.12E-12	84	1.03E-14	762	0.0091864	0.008475	2.26817	1	12	D8S351
0.641023	1.70841	84	0.007813	762	0.0045932	0.004843	0.217407	1	-2	D8S351
0.421546	1.39E-10	84	3.67E-13	762	0.0026247	0.002421	0.646001	1	22	D8S351
0.720445	0.943516	98	0.322917	825	0.335758	0.334419	0.128067	1	-8	D8S503
0.650243	0.928762	98	0.317708	825	0.333939	0.332248	0.205594	1	0	D8S503
0.388534	1.19191	98	0.197917	825	0.171515	0.174267	0.8086	1	-2	D8S503
0.55512	0.814091	98	0.046875	825	0.0569697	0.055918	0.348225	1	-4	D8S503
0.776741	0.885429	98	0.03125	825	0.0351515	0.034745	0.080411	1	2	D8S503
0.143381	1.53953	98	0.083333	825	0.0557576	0.058632	2.14129	1	-8	D8S503
0.416197	9.71E-12	98	1.77E-14	825	0.0018182	0.001629	0.661029	1	-10	D8S503
0.158706	3.62E-12	98	1.98E-14	825	0.0054546	0.004888	1.98651	1	4	D8S503
0.250019	8.33E-13	98	3.04E-15	825	0.0036364	0.003257	1.3232	1	-12	D8S503
0.026569	0.718368	101	0.50495	876	0.586758	0.578301	4.91862	1	2	D8S516
0.12838	1.30831	101	0.247525	876	0.200913	0.205732	2.31198	1	4	D8S516
0.351225	1.2528	101	0.113881	876	0.0930385	0.095189	0.869025	1	0	D8S516
0.804679	1.06406	101	0.09901	876	0.0936073	0.094188	0.081155	1	-2	D8S516
0.624055	1.37502	101	0.014851	876	0.0108448	0.011259	0.240209	1	-4	D8S516
0.262284	0.373998	101	0.00495	876	0.0131279	0.012283	1.25666	1	6	D8S516
0.014431	8.78888	101	0.014851	876	0.0017123	0.003071	5.98463	1	8	D8S516
0.147569	1.2585	95	0.415789	663	0.361237	0.368074	2.0972	1	6	D8S520
0.079351	0.702699	95	0.163158	663	0.217195	0.210422	3.07815	1	8	D8S520
0.07372	0.236635	95	0.005263	663	0.0218703	0.019789	3.19818	1	10	D8S520
0.454748	1.19606	95	0.126316	663	0.107843	0.110158	0.558791	1	0	D8S520
0.681499	0.875169	95	0.057895	663	0.0656109	0.064644	0.188443	1	-10	D8S520
0.155991	1.39865	95	0.136842	663	0.10181	0.108201	2.01267	1	4	D8S520
0.119945	7.46E-12	95	5.10E-14	663	0.0067873	0.005937	2.41804	1	-12	D8S520
0.843367	0.886546	95	0.094737	663	0.105581	0.104222	0.214368	1	2	D8S520
0.081455	3.16E-16	95	3.13E-18	663	0.0098039	0.008575	3.49769	1	-2	D8S520
0.48409	1.17E-13	95	1.77E-18	663	0.0015083	0.001319	0.536012	1	12	D8S520
0.604736	9.35E-12	95	7.06E-15	663	0.0007541	0.00068	0.267911	1	9	D8S520
0.160754	0.808303	97	0.474227	840	0.527381	0.521878	1.96712	1	0	D8S542
0.554142	0.907693	97	0.304124	840	0.325	0.322839	0.349949	1	2	D8S542
0.007528	1.87593	97	0.22185	840	0.145238	0.163148	7.14237	1	4	D8S542
0.417889	1.77E-10	97	3.16E-13	840	0.0017857	0.001601	0.856244	1	-2	D8S542
0.84009	4.66E-14	97	2.78E-17	840	0.0005952	0.000634	0.218624	1	-12	D8S542
0.709164	1.10417	93	0.096774	814	0.0884521	0.089305	0.139113	1	-8	D8S550
0.820119	1.05534	93	0.123656	814	0.117936	0.118523	0.051707	1	12	D8S550
0.07782	0.728739	93	0.22043	814	0.280098	0.27398	3.10985	1	14	D8S550
0.170811	0.72134	93	0.107527	814	0.14312	0.139471	1.87681	1	-2	D8S550
0.084467	2.12756	93	0.048387	814	0.0233415	0.02591	3.41856	1	8	D8S550
0.097575	1.77163	93	0.064516	814	0.0374693	0.040243	2.74473	1	18	D8S550
0.55045	0.828982	93	0.05914	814	0.0706388	0.06948	0.356512	1	-6	D8S550
0.487631	1.19986	93	0.102151	814	0.0866093	0.088203	0.481749	1	16	D8S550
0.656014	1.14821	93	0.069893	814	0.0814251	0.082293	0.198401	1	0	D8S550
0.395481	1.28543	93	0.080645	814	0.0838821	0.065601	0.722025	1	10	D8S550
0.162329	6.71E-12	93	3.73E-14	814	0.0055283	0.004961	1.9524	1	2	D8S550
0.343372	1.63802	93	0.026882	814	0.0165848	0.017641	0.897801	1	20	D8S550
0.51053	1.09E-10	93	1.35E-13	814	0.0012285	0.001103	0.43298	1	6	D8S550
0.351938	2.82E-14	93	7.19E-17	814	0.002457	0.002205	0.866466	1	22	D8S550
0.51053	1.09E-10	93	1.35E-13	814	0.0012285	0.001103	0.43298	1	4	D8S550
0.136893	0.658779	27	0.5	391	0.803581	0.59689	2.21254	1	1	DG00AAHBG
0.136893	1.52258	27	0.5	391	0.398419	0.40311	2.21254	1	2	DG00AAHBG
0.300119	0.81773	66	0.659091	725	0.702759	0.699115	1.07366	1	2	DG00AAHBH
0.300119	1.2229	66	0.340909	725	0.297241	0.300885	1.07366	1	1	DG00AAHBH
0.247129	0.797863	82	0.629032	811	0.680025	0.676403	1.33946	1	3	DG00AAHBI
0.247129	1.25335	82	0.370968	811	0.319975	0.323597	1.33946	1	1	DG00AAHBI
0.259878	1.25165	86	0.232558	531	0.194915	0.200162	1.28941	1	0	DG8S117
0.259878	0.798948	86	0.767442	531	0.805085	0.799838	1.26941	1	9	DG8S117
0.949601	0.983559	101	0.910891	826	0.912228	0.912082	0.003995	1	0	DG8S118
0.949601	1.01672	101	0.089109	826	0.0877724	0.087918	0.003995	1	5	DG8S118
0.247725	0.826649	87	0.396552	604	0.442881	0.437048	1.33609	1	0	DG8S127
0.51935	0.845888	87	0.103448	604	0.120033	0.117945	0.415183	1	6	DG8S127
0.09682	1.30975	87	0.5	604	0.432947	0.441389	2.75716	1	1	DG8S127
0.245581	8.27E-12	87	3.44E-14	604	0.0041391	0.003618	1.34827	1	2	DG8S127

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0.877323	0.92813	93	0.736559	646	0.750774	0.748985	0.173155	1	0	DG8S128
0.877323	1.07744	93	0.263441	646	0.249226	0.251015	0.173155	1	4	DG8S128
0.810112	0.920497	92	0.353281	772	0.372409	0.37037	0.260012	1	4	DG8S130
0.334773	0.880241	92	0.5	772	0.537565	0.533565	0.930347	1	0	DG8S130
0.002632	2.62787	92	0.086957	772	0.0349741	0.040509	9.04817	1	-16	DG8S130
0.986165	0.987072	92	0.01087	772	0.0110104	0.010995	0.000301	1	-4	DG8S130
0.684976	1.18581	92	0.043478	772	0.0369171	0.037816	0.187538	1	8	DG8S130
0.244659	6.34E-13	92	2.47E-15	772	0.003886	0.003472	1.35355	1	-12	DG8S130
0.291287	4.2132	92	0.005435	772	0.0012953	0.001738	1.11366	1	12	DG8S130
0.410915	2.49E-11	92	4.84E-14	772	0.001943	0.001738	0.678151	1	-8	DG8S130
0.71498	1.08295	98	0.862245	739	0.852503	0.853844	0.133354	1	0	DG8S134
0.592821	0.888749	98	0.132853	739	0.14682	0.145161	0.285981	1	4	DG8S134
0.183435	7.57436	98	0.005102	739	0.0006766	0.001195	1.76957	1	2	DG8S134
0.774128	1.04852	92	0.688478	779	0.657895	0.659013	0.082359	1	0	DG8S136
0.986516	1.00499	92	0.076087	779	0.0767381	0.075775	0.000288	1	-6	DG8S136
0.803865	1.09048	92	0.054348	779	0.0500542	0.050517	0.081677	1	2	DG8S136
0.641268	0.84886	92	0.048913	779	0.0571245	0.056257	0.217088	1	-4	DG8S136
0.940311	1.02503	92	0.059783	779	0.0584082	0.058553	0.005607	1	4	DG8S136
0.39935	0.705968	92	0.032609	779	0.0455712	0.044202	0.710282	1	6	DG8S136
0.251291	0.632858	92	0.016304	779	0.0301869	0.028703	1.31611	1	-2	DG8S136
0.412203	1.52634	92	0.027174	779	0.0179718	0.018944	0.872438	1	8	DG8S136
0.290348	3.25E-12	92	1.05E-14	779	0.0032082	0.00287	1.11801	1	-8	DG8S136
0.288632	4.2514	92	0.005435	779	0.0012837	0.001722	1.12599	1	10	DG8S136
0.636514	4.82E-11	92	3.09E-14	779	0.0006418	0.000574	0.22333	1	-10	DG8S136
0.08618	5.69597	92	0.01087	779	0.0019256	0.00287	2.94432	1	-14	DG8S136
0.131875	0.554385	19	0.210526	234	0.324788	0.318206	2.27265	1	-2	DG8S137
0.24739	1.87447	19	0.131579	234	0.0747883	0.079051	1.33798	1	2	DG8S137
0.971193	1.02778	19	0.052632	234	0.0512821	0.051383	0.001304	1	10	DG8S137
0.753076	0.825975	19	0.078947	234	0.0940171	0.092885	0.098965	1	4	DG8S137
0.816114	1.29581	19	0.131579	234	0.104701	0.106719	0.251367	1	6	DG8S137
0.470942	1.46006	19	0.131579	234	0.0940171	0.096838	0.519764	1	-4	DG8S137
0.558647	0.780645	19	0.184211	234	0.224359	0.221344	0.342052	1	0	DG8S137
0.697516	1.55406	19	0.026316	234	0.017094	0.017787	0.151068	1	12	DG8S137
0.193815	6.29729	19	0.026316	234	0.0042735	0.005929	1.68838	1	18	DG8S137
0.692589	1.98E-10	19	4.23E-13	234	0.0021388	0.001978	0.156297	1	14	DG8S137
0.428411	1.33E-11	19	1.14E-13	234	0.008547	0.007905	0.627129	1	8	DG8S137
0.022558	108030	19	0.026313	234	2.50E-07	0.001978	5.20224	1	16	DG8S137
0.059505	0.607662	91	0.082418	761	0.128778	0.123826	3.65114	1	-1	DG8S138
0.058382	1.65529	91	0.917582	761	0.870565	0.875587	3.64134	1	0	DG8S138
0.634523	4.06E-10	91	2.67E-13	761	0.000657	0.000587	0.225977	1	1	DG8S138
0.992623	1.00158	81	0.401235	585	0.400855	0.400901	8.55E-05	1	0	DG8S147
0.990781	1.00198	81	0.598785	585	0.598291	0.598348	0.000134	1	2	DG8S147
0.610492	1.11E-12	81	9.53E-16	585	0.0008547	0.000751	0.25946	1	1	DG8S147
0.306745	0.715394	97	0.051548	694	0.0706052	0.068268	1.04484	1	-4	DG8S148
0.189157	1.24392	97	0.324742	694	0.278818	0.28445	1.72417	1	2	DG8S148
0.023262	0.644275	97	0.170103	694	0.241354	0.232617	5.14887	1	-2	DG8S148
0.486188	1.11554	97	0.402062	694	0.376081	0.379267	0.484957	1	0	DG8S148
0.499249	1.31378	97	0.041237	694	0.0317003	0.03287	0.456533	1	4	DG8S148
0.003727	78879.2	97	0.010308	694	1.32E-07	0.001284	8.41214	1	6	DG8S148
0.469286	5.48E-11	97	7.91E-14	694	0.0014409	0.001264	0.523658	1	-17	DG8S148
0.113102	1.39634	50	0.51	473	0.427061	0.43499	2.51033	1	-2	DG8S153
0.755554	0.80203	50	0.11	473	0.120507	0.119503	0.086923	1	0	DG8S153
0.630406	0.626938	50	0.01	473	0.0158582	0.015296	0.231511	1	-8	DG8S153
0.693522	0.815219	50	0.04	473	0.0486258	0.047801	0.155299	1	2	DG8S153
0.843493	0.938637	50	0.12	473	0.12685	0.126195	0.038978	1	6	DG8S153
0.836	1.13938	50	0.03	473	0.0264271	0.026768	0.042854	1	14	DG8S153
0.081855	0.540989	50	0.08	473	0.138478	0.132887	3.02767	1	8	DG8S153
0.940056	1.03404	50	0.06	473	0.0581395	0.058317	0.005655	1	10	DG8S153
0.934189	1.05269	50	0.03	473	0.0285412	0.028681	0.006819	1	4	DG8S153
0.315528	1.24E-11	50	6.58E-14	473	0.0052854	0.00478	1.0074	1	12	DG8S153
0.480374	2.37881	50	0.01	473	0.00442283	0.00478	0.498013	1	-4	DG8S153
0.691922	0.908871	43	0.290698	453	0.311258	0.309478	0.157012	1	4	DG8S155
0.260822	1.47027	43	0.139535	453	0.0993377	0.102823	1.26439	1	8	DG8S155
0.980877	0.990648	43	0.093023	453	0.093819	0.09375	0.000587	1	2	DG8S155
0.316582	0.759107	43	0.197674	453	0.245033	0.240927	1.00302	1	6	DG8S155
0.613999	1.38783	43	0.034884	453	0.0253863	0.02621	0.254392	1	14	DG8S155
0.45684	1.29768	43	0.127907	453	0.101545	0.103831	0.554118	1	0	DG8S155
0.882668	0.825983	43	0.058139	453	0.0695364	0.068548	0.18714	1	10	DG8S155
0.319821	0.515478	43	0.023256	453	0.0441501	0.042339	0.990498	1	12	DG8S155
0.128687	10.6473	43	0.011628	453	0.0011037	0.002016	2.30827	1	-18	DG8S155
0.331858	3.54119	43	0.011628	453	0.0033113	0.004032	0.841641	1	-10	DG8S155
0.870119	8.40E-13	43	9.28E-18	453	0.0011038	0.001008	0.181463	1	-2	DG8S155
0.460382	1.52E-11	43	5.04E-14	453	0.0033113	0.003024	0.544986	1	16	DG8S155
0.128687	10.6473	43	0.011628	453	0.0011037	0.002016	2.30827	1	-12	DG8S155
0.40513	1.14371	89	0.41573	777	0.383528	0.386836	0.693046	1	6	DG8S156
0.245044	0.83143	89	0.522472	777	0.568211	0.568351	1.35134	1	0	DG8S156
0.20887	1.63587	89	0.050562	777	0.0315315	0.033487	1.57824	1	-6	DG8S156
0.401222	2.9209	89	0.005818	777	0.0019305	0.002309	0.704662	1	3	DG8S156
0.285718	0.378077	89	0.005618	777	0.0148005	0.013857	1.23872	1	9	DG8S156
0.33947	0.732904	82	0.920732	558	0.940647	0.938088	0.912432	1	0	DG8S159
0.475481	1.29748	82	0.060976	558	0.0476619	0.049373	0.508211	1	-2	DG8S159
0.602159	1.57525	82	0.018293	558	0.0116908	0.012539	0.450371	1	2	DG8S159

FIG. 11D4

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0.365296	0.8673	95	0.388474	735	0.42381	0.41988	0.819604	1	0	DG8S161
0.365296	1.163	95	0.810526	735	0.57619	0.56012	0.819604	1	2	DG8S161
0.104578	1.27982	97	0.530928	815	0.469325	0.475877	2.6343	1	0	DG8S163
0.104578	0.781357	97	0.469072	815	0.530875	0.524123	2.6343	1	3	DG8S163
0.616405	1.09015	83	0.349388	759	0.33004	0.331948	0.250952	1	0	DG8S170
0.438895	0.877032	83	0.620482	759	0.650856	0.647862	0.599168	1	2	DG8S170
0.413258	1.60494	83	0.024096	759	0.0151515	0.016033	0.66941	1	-4	DG8S170
0.266779	4.59391	83	0.006024	759	0.0013175	0.001781	1.23323	1	-19	DG8S170
0.619255	9.02E-11	83	1.19E-13	759	0.0013175	0.001188	0.415373	1	-8	DG8S170
0.519255	9.02E-11	83	1.19E-13	759	0.0013175	0.001188	0.415373	1	-2	DG8S170
0.139776	0.791041	95	0.378947	643	0.435459	0.428184	2.18043	1	14	DG8S177
0.693639	0.675133	95	0.005263	643	0.0077761	0.007453	0.155174	1	20	DG8S177
0.364696	1.17506	95	0.268421	643	0.237947	0.24187	0.821658	1	12	DG8S177
0.653875	1.12247	95	0.105263	643	0.0948678	0.096208	0.201049	1	18	DG8S177
0.470666	9.87E-11	95	1.54E-13	643	0.0015552	0.001355	0.551597	1	2	DG8S177
0.880841	0.951725	95	0.057895	643	0.0606532	0.060298	0.022471	1	0	DG8S177
0.82908	1.05125	95	0.131579	643	0.125972	0.126694	0.046605	1	16	DG8S177
0.278312	1.49758	95	0.052632	643	0.0357698	0.03794	1.17631	1	10	DG8S177
0.724908	0.944594	87	0.511494	622	0.525723	0.523977	0.123839	1	0	DG8S179
0.724908	1.05866	87	0.488506	622	0.474277	0.476023	0.123839	1	7	DG8S179
0.762507	0.948204	95	0.263158	625	0.2738	0.272222	0.091319	1	10	DG8S181
0.143746	0.763986	95	0.21579	625	0.2648	0.258333	2.1374	1	12	DG8S181
0.095135	0.638224	95	0.078947	625	0.1184	0.113194	2.78526	1	4	DG8S181
0.180075	1.39938	95	0.121053	625	0.0896	0.09375	1.79701	1	0	DG8S181
0.08582	1.43454	95	0.184211	625	0.136	0.142361	2.95109	1	8	DG8S181
0.506027	1.47192	95	0.021053	625	0.0144	0.015278	0.442274	1	16	DG8S181
0.848265	0.91141	95	0.026316	625	0.0288	0.028472	0.037592	1	18	DG8S181
0.624977	1.1672	95	0.068421	625	0.0692	0.060417	0.238934	1	14	DG8S181
0.205305	3.31384	95	0.010526	625	0.0032	0.004167	1.60423	1	-2	DG8S181
0.84956	0.821429	95	0.005263	625	0.0084	0.00625	0.035978	1	2	DG8S181
0.953238	0.93953	95	0.005263	625	0.0056	0.005558	0.003439	1	6	DG8S181
0.351987	0.752231	68	0.897059	818	0.920538	0.918736	0.866281	1	0	DG8S182
0.351987	1.32938	68	0.102941	818	0.0794621	0.081264	0.866281	1	-3	DG8S182
0.457958	0.867661	81	0.734568	641	0.76131	0.75831	0.550882	1	0	DG8S188
0.457958	1.15252	81	0.265432	641	0.23869	0.24169	0.550882	1	-1	DG8S188
0.419757	1.1713	59	0.59322	568	0.554577	0.558214	0.650995	1	0	DG8S192
0.51537	1.17558	59	0.184915	568	0.170775	0.173046	0.423149	1	2	DG8S192
0.207352	0.33217	59	0.008475	568	0.0246479	0.023126	1.58982	1	16	DG8S192
0.245975	0.658408	59	0.067797	568	0.0994718	0.096491	1.34602	1	-2	DG8S192
0.677246	1.16807	59	0.076271	568	0.0660211	0.066986	0.173242	1	4	DG8S192
0.319662	2.38E-12	59	1.05E-14	568	0.0044014	0.003987	0.990328	1	8	DG8S192
0.57227	0.800085	59	0.059322	568	0.0730634	0.07177	0.318899	1	12	DG8S192
0.529354	1.62E-13	59	2.87E-16	568	0.0017606	0.001595	0.395632	1	-4	DG8S192
0.373517	7.84E-11	59	2.77E-13	568	0.0035211	0.00319	0.791929	1	10	DG8S192
0.529354	1.62E-13	59	2.87E-16	568	0.0017606	0.001595	0.395632	1	14	DG8S192
0.021783	0.700803	97	0.546392	730	0.632192	0.622128	5.26301	1	0	DG8S197
0.021783	1.42694	97	0.453608	730	0.367808	0.377872	5.26301	1	1	DG8S197
0.082803	1.29436	98	0.566327	677	0.502216	0.510323	2.82506	1	0	DG8S201
0.935151	0.98689	98	0.331633	677	0.334564	0.334194	0.00682	1	4	DG8S201
0.021273	0.54752	98	0.076531	677	0.131462	0.124516	5.30432	1	-2	DG8S201
0.628116	0.798125	98	0.02551	677	0.0317578	0.030968	0.234624	1	2	DG8S201
0.779148	0.908211	97	0.948454	735	0.953061	0.952524	0.078641	1	0	DG8S212
0.779148	1.1035	97	0.051546	735	0.0469388	0.047478	0.078641	1	2	DG8S212
0.501767	0.868168	53	0.613207	392	0.846684	0.642697	0.451197	1	4	DG8S215
0.469316	1.1675	53	0.386792	392	0.350765	0.355056	0.523585	1	0	DG8S215
0.476067	8.32E-11	53	1.82E-13	392	0.002551	0.002247	0.507858	1	2	DG8S215
0.049325	1.4219	83	0.445783	292	0.361301	0.38	3.86426	1	0	DG8S221
0.492758	1.14224	83	0.301205	292	0.273973	0.28	0.470498	1	5	DG8S221
0.001985	0.416254	83	0.078313	292	0.189521	0.149333	9.56296	1	-2	DG8S221
0.357409	0.688952	83	0.036145	292	0.0530822	0.049333	0.846976	1	7	DG8S221
0.922396	0.974125	83	0.120482	292	0.123288	0.122667	0.00949	1	4	DG8S221
0.868514	0.878049	83	0.012048	292	0.0136986	0.013333	0.027406	1	1	DG8S221
0.479182	4.03E-11	83	8.91E-14	292	0.0017123	0.001333	0.500724	1	8	DG8S221
0.655811	1.76363	83	0.006024	292	0.0034247	0.004	0.198662	1	-1	DG8S221
0.787685	1.04516	94	0.340426	726	0.330578	0.331707	0.072532	1	0	DG8S232
0.458767	1.12444	94	0.409575	726	0.381543	0.384756	0.548901	1	2	DG8S232
0.053827	0.622749	94	0.095745	726	0.145317	0.139634	3.71806	1	-8	DG8S232
0.695287	1.11362	94	0.090426	726	0.0819559	0.082927	0.163421	1	-4	DG8S232
0.965139	0.982323	94	0.037234	726	0.0378788	0.037805	0.00191	1	4	DG8S232
0.519055	1.38954	94	0.026596	726	0.0192837	0.020122	0.41577	1	-2	DG8S232
0.621627	8.43E-13	94	5.81E-16	726	0.0006887	0.00081	0.243588	1	-6	DG8S232
0.323362	1.26E-10	94	3.48E-13	726	0.0027548	0.002439	0.9753	1	6	DG8S232
0.030987	2.01171	96	0.953125	672	0.90997	0.915365	4.6548	1	0	DG8S238
0.030967	0.497086	96	0.046875	672	0.0900298	0.084635	4.6548	1	-8	DG8S238
0.120276	0.73024	57	0.570176	476	0.644958	0.636981	2.41372	1	4	DG8S242
0.120276	1.38941	57	0.429825	476	0.355042	0.363039	2.41372	1	0	DG8S242
0.130702	1.55627	93	0.930108	468	0.895299	0.90107	2.28415	1	0	DG8S245
0.926687	0.969323	93	0.05914	468	0.0608974	0.060606	0.008471	1	-4	DG8S245
0.019055	0.25	93	0.010753	468	0.0416687	0.038542	5.4965	1	4	DG8S245
0.394274	4.62E-11	93	9.90E-14	468	0.0021368	0.001783	0.72572	1	-8	DG8S245
0.329233	0.851099	84	0.529762	682	0.569648	0.565274	0.963792	1	0	DG8S249
0.396524	1.19007	84	0.208333	682	0.181085	0.184073	0.718843	1	-19	DG8S249

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0.92549	1.08008	84	0.017857	682	0.0168622	0.016971	0.008746	1	-17	DG8S249
0.278027	0.382948	84	0.005952	682	0.0153959	0.01436	1.17671	1	-21	DG8S249
0.901316	0.966221	84	0.095238	682	0.0982405	0.097911	0.015376	1	-2	DG8S249
0.701106	1.35743	84	0.011905	682	0.0087977	0.009138	0.147323	1	6	DG8S249
0.356731	1.39991	84	0.059524	682	0.0432551	0.045039	0.849367	1	2	DG8S249
0.020299	3.87E-12	84	6.64E-14	682	0.0168622	0.015013	5.386	1	-6	DG8S249
0.95049	0.95464	84	0.011905	682	0.0124633	0.012402	0.003855	1	4	DG8S249
0.094561	1.89873	84	0.059524	682	0.0322581	0.035248	2.79496	1	-4	DG8S249
0.201691	1.05E-11	84	5.43E-14	682	0.005132	0.004569	1.63009	1	-1	DG8S249
0.394709	1.31798	96	0.087708	584	0.052226	0.054412	0.724387	1	-10	DG8S250
0.354176	0.841246	96	0.213542	584	0.244007	0.239706	0.85844	1	-4	DG8S250
0.668478	1.10211	96	0.140625	584	0.129281	0.130882	0.183387	1	2	DG8S250
0.278992	1.22976	96	0.223958	584	0.190068	0.194853	1.17199	1	4	DG8S250
0.481973	1.23603	98	0.078125	584	0.0642123	0.068177	0.494395	1	-2	DG8S250
0.075071	0.71287	98	0.192708	584	0.250856	0.242647	3.18851	1	0	DG8S250
0.896366	1.10718	98	0.010417	584	0.0094178	0.009559	0.016966	1	8	DG8S250
0.078427	2.81235	96	0.026042	584	0.0094178	0.011765	3.0972	1	-8	DG8S250
0.695254	0.790201	96	0.015625	584	0.0196918	0.019118	0.153456	1	6	DG8S250
0.760007	1.22011	96	0.015625	584	0.0128425	0.013235	0.093313	1	-12	DG8S250
0.90986	1.0747	96	0.015625	584	0.0145548	0.014706	0.012818	1	-6	DG8S250
0.269464	7.88E-14	96	2.64E-16	584	0.0034247	0.002941	1.21947	1	12	DG8S250
0.751011	0.949842	92	0.819565	680	0.631618	0.630181	0.100683	1	0	DG8S257
0.770454	1.11429	92	0.048913	680	0.0441178	0.044689	0.085136	1	-6	DG8S257
0.95664	1.00924	92	0.315217	680	0.313235	0.313472	0.002956	1	-2	DG8S257
0.942723	1.05652	92	0.01087	680	0.0102941	0.010363	0.005162	1	2	DG8S257
0.187243	7.42615	92	0.005435	680	0.0007353	0.001295	1.73918	1	-9	DG8S257
0.599971	1.11205	83	0.218867	637	0.199372	0.201389	0.275039	1	15	DG8S258
0.208266	1.23457	83	0.602409	637	0.55102	0.556944	1.58344	1	18	DG8S258
0.047074	1.80E-15	83	2.29E-17	637	0.0125589	0.011111	3.94276	1	0	DG8S258
0.048887	0.650118	83	0.150602	637	0.214286	0.206944	3.87924	1	12	DG8S258
0.483799	3.57E-11	83	5.61E-14	637	0.0015699	0.001389	0.490289	1	24	DG8S258
0.706939	1.23358	83	0.024066	637	0.0198232	0.020139	0.141353	1	21	DG8S258
0.483799	3.57E-11	83	5.61E-14	637	0.0015699	0.001389	0.490289	1	33	DG8S258
0.037537	5.8362.2	83	0.006023	637	1.04E-07	0.000694	4.3259	1	11	DG8S258
0.759909	0.938597	57	0.692982	549	0.70674	0.705446	0.093391	1	2	DG8S261
0.759909	1.06769	57	0.307018	549	0.28326	0.294554	0.093391	1	0	DG8S261
0.969404	1.02076	55	0.036364	561	0.0356506	0.035714	0.001471	1	-4	DG8S262
0.683866	0.921811	55	0.509091	561	0.529412	0.527597	0.165808	1	0	DG8S262
0.843058	0.931097	55	0.081818	561	0.087344	0.086851	0.039197	1	-10	DG8S262
0.216881	1.32844	55	0.272727	561	0.220143	0.224838	1.52489	1	2	DG8S262
0.603723	0.739227	55	0.027273	561	0.0365419	0.035714	0.269417	1	-2	DG8S262
0.767637	0.880436	55	0.054546	561	0.0614973	0.060877	0.087301	1	4	DG8S262
0.86772	1.1358	55	0.018182	561	0.0160428	0.016234	0.027741	1	6	DG8S262
0.150491	8.87E-13	55	8.79E-15	561	0.0098039	0.008929	2.06726	1	-14	DG8S262
0.386639	2.81E-11	55	1.01E-13	561	0.0035651	0.003247	0.749485	1	8	DG8S262
0.233927	1.24619	97	0.231959	751	0.195073	0.199292	1.41882	1	15	DG8S265
0.823939	1.03482	97	0.56701	751	0.558589	0.559552	0.049498	1	18	DG8S265
0.031167	2.75E-12	97	3.53E-14	751	0.0126498	0.011203	4.64376	1	0	DG8S265
0.189581	0.772375	97	0.170103	751	0.20972	0.205189	1.7208	1	12	DG8S265
0.473203	1.44523	97	0.025773	751	0.017976	0.018868	0.514486	1	21	DG8S265
0.485625	4.63E-11	97	6.17E-14	751	0.0013316	0.001179	0.486205	1	33	DG8S265
0.925649	1.10659	97	0.005165	751	0.0046605	0.004717	0.008709	1	-8	DG8S265
0.631697	1.08177	85	0.476471	615	0.456911	0.459288	0.228767	1	-2	DG8S266
0.777865	0.954415	85	0.423529	615	0.434959	0.433571	0.079582	1	0	DG8S266
0.74591	0.916458	85	0.1	615	0.10813	0.107143	0.105	1	-4	DG8S266
0.484424	1.11477	97	0.417526	741	0.391363	0.394391	0.488888	1	-4	DG8S269
0.111271	0.783298	97	0.520619	741	0.580872	0.573986	2.53608	1	0	DG8S269
0.020752	2.31734	97	0.061856	741	0.0276653	0.031823	5.34751	1	-5	DG8S269
0.012522	0.536447	50	0.19	587	0.304233	0.294976	6.23539	1	-2	DG8S271
0.096503	1.44289	50	0.69	587	0.606702	0.613452	2.7624	1	0	DG8S271
0.673308	1.16182	50	0.1	587	0.0873016	0.088331	0.177756	1	2	DG8S271
0.027247	11.5511	50	0.02	587	0.0017837	0.003241	4.87508	1	4	DG8S271
0.201722	2.20843	95	0.021053	674	0.0096439	0.011053	1.82986	1	-8	DG8S277
0.036175	1.41743	95	0.347368	674	0.272997	0.282185	4.38885	1	10	DG8S277
0.63596	0.921088	95	0.268421	674	0.284866	0.282835	0.224065	1	0	DG8S277
0.965799	0.951486	95	0.073684	674	0.0771513	0.076723	0.02656	1	-2	DG8S277
0.094726	0.726956	95	0.189474	674	0.243323	0.236671	2.79217	1	2	DG8S277
0.241235	0.640208	95	0.038842	674	0.0563798	0.053966	1.37337	1	8	DG8S277
0.956809	0.96694	95	0.01579	674	0.0163205	0.016255	0.00296	1	4	DG8S277
0.577818	1.58274	95	0.010526	674	0.0066766	0.007152	0.309775	1	-4	DG8S277
0.057844	2.71467	95	0.031579	674	0.0118694	0.014304	3.59816	1	6	DG8S277
0.161764	0.304808	95	0.005263	674	0.0170823	0.015605	1.95766	1	12	DG8S277
0.25043	1.15E-12	95	4.27E-15	674	0.0037092	0.003251	1.32091	1	14	DG8S277
0.765951	1.05169	83	0.60241	576	0.590278	0.591806	0.088811	1	0	DG8S285
0.884656	0.929874	83	0.307229	576	0.322917	0.320941	0.164932	1	2	DG8S285
0.742479	1.10872	83	0.078313	576	0.0711805	0.072079	0.10796	1	1	DG8S285
0.716093	0.768292	83	0.012048	576	0.015625	0.015175	0.132287	1	-1	DG8S285
0.571041	0.909551	87	0.586207	500	0.609	0.605622	0.320945	1	0	DG8S291
0.066487	0.38118	87	0.017241	500	0.044	0.040034	3.38769	1	-2	DG8S291
0.9626	1.00913	87	0.235632	500	0.234	0.234242	0.002199	1	4	DG8S291
0.081896	1.52991	87	0.149425	500	0.103	0.109881	3.02667	1	2	DG8S291
0.858761	1.15116	87	0.011494	500	0.01	0.010222	0.031667	1	6	DG8S291

FIG. 11D6



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0.988027	1.00277	80	0.7125	729	0.711934	0.71199	0.000225	1	2	DG8S292
0.988027	0.997243	80	0.2875	729	0.288068	0.28801	0.000225	1	0	DG8S292
0.831828	1.03936	90	0.255555	727	0.248281	0.249082	0.045098	1	12	DG8S297
0.551964	0.905275	90	0.327778	727	0.350069	0.347613	0.353811	1	0	DG8S297
0.933583	0.980521	90	0.127778	727	0.129986	0.129743	0.006945	1	4	DG8S297
0.290398	1.27318	90	0.15	727	0.121733	0.124847	1.11778	1	16	DG8S297
0.223202	0.347581	90	0.005556	727	0.0158184	0.014888	1.48368	1	8	DG8S297
0.053097	3.64899	90	0.022222	727	0.0061898	0.007956	3.74085	1	-4	DG8S297
0.464751	1.4551	90	0.027778	727	0.0182572	0.020196	0.534428	1	18	DG8S297
0.379013	0.552111	90	0.011111	727	0.019945	0.018872	0.773901	1	8	DG8S297
0.974297	0.984688	90	0.027778	727	0.0281981	0.028152	0.001038	1	10	DG8S297
0.593688	0.820513	90	0.044444	727	0.0539451	0.052632	0.284622	1	14	DG8S297
0.62894	7.55E-10	90	5.20E-13	727	0.0006878	0.000812	0.233501	1	2	DG8S297
0.146628	6.57E-12	90	4.09E-14	727	0.0061898	0.005508	2.10699	1	-2	DG8S297
0.484916	0.874705	98	0.796918	726	0.816804	0.81432	0.487787	1	0	DG8S298
0.503187	1.13979	98	0.193878	726	0.174242	0.176578	0.448251	1	2	DG8S298
0.864815	1.14118	98	0.010204	726	0.0089532	0.009102	0.028984	1	1	DG8S298
0.945889	1.01429	87	0.816092	602	0.813953	0.814224	0.004608	1	0	DG8S301
0.945889	0.985915	87	0.183908	602	0.188047	0.185776	0.004608	1	1	DG8S301
0.575354	1.0993	86	0.368279	666	0.344595	0.347074	0.313805	1	28	DG8S302
0.345297	0.781118	86	-0.098837	666	0.123123	0.120348	0.890667	1	24	DG8S302
0.771509	0.950489	86	0.30814	666	0.319069	0.317819	0.084333	1	28	DG8S302
0.629411	1.17834	86	0.063954	666	0.0548048	0.055851	0.23286	1	30	DG8S302
0.882719	1.03304	88	0.162781	666	0.158408	0.15891	0.021763	1	0	DG8S302
0.701115	1.07445	88	0.767045	756	0.753968	0.755332	0.147314	1	2	DG8S303
0.30383	2.47127	88	0.011364	756	0.0046298	0.005332	1.05731	1	-4	DG8S303
0.569859	0.897809	88	0.221691	756	0.240741	0.238744	0.322918	1	-2	DG8S303
0.638818	9.80E-13	88	6.48E-16	756	0.0006614	0.000592	0.220291	1	0	DG8S303
0.573528	0.843182	51	0.137255	315	0.15873	0.155738	0.318815	1	0	DG8S307
0.323683	1.27087	51	0.754902	315	0.707938	0.714481	0.974008	1	4	DG8S307
0.425627	0.726679	51	0.088628	315	0.0920835	0.088798	0.834727	1	-4	DG8S307
0.922209	0.948194	51	0.039216	315	0.0412698	0.040984	0.009536	1	8	DG8S307
0.171256	0.801528	90	0.577778	689	0.830624	0.824519	1.87192	1	0	DG8S308
0.265085	1.25437	90	0.2	689	0.168183	0.17009	1.242	1	2	DG8S308
0.369125	1.28411	90	0.111111	689	0.0899855	0.092426	0.806607	1	-14	DG8S308
0.391559	1.31527	90	0.072222	689	0.0558781	0.057768	0.734087	1	-4	DG8S308
0.175154	0.418852	90	0.011111	689	0.0281248	0.02439	1.83827	1	-6	DG8S308
0.340146	0.422097	90	0.005558	689	0.0130824	0.012195	0.809881	1	-2	DG8S308
0.710487	1.23	90	0.022222	689	0.0181422	0.018614	0.137791	1	4	DG8S308
0.859898	0.832488	99	0.005051	680	0.0060606	0.005929	0.031154	1	8	DG8S316
0.808112	0.960815	99	0.308081	660	0.316867	0.315547	0.058982	1	10	DG8S316
0.375005	1.14554	99	0.464848	660	0.431081	0.435441	0.787011	1	0	DG8S316
0.129566	0.664218	99	0.075768	660	0.109848	0.105402	2.2977	1	12	DG8S316
0.867332	1.04077	99	0.116182	660	0.112121	0.112648	0.027905	1	14	DG8S316
0.319464	1.61875	99	0.030303	660	0.0189394	0.020422	0.99114	1	18	DG8S316
0.16135	2.63E-12	99	1.40E-14	660	0.005303	0.004611	1.96153	1	2	DG8S316
0.720932	1.07685	52	0.423077	606	0.405116	0.406535	0.127601	1	2	DG8S322
0.685172	0.788479	52	0.028846	606	0.0363036	0.035714	0.164362	1	10	DG8S322
0.268308	1.25949	52	0.423077	606	0.367987	0.37234	1.22537	1	0	DG8S322
0.012976	0.365904	52	0.048077	606	0.121287	0.115502	6.17244	1	4	DG8S322
0.773078	1.11905	52	0.076923	606	0.0893069	0.089909	0.083146	1	6	DG8S322
0.735723	0.944798	100	0.715	700	0.726429	0.725	0.113921	1	0	DG8S323
0.735723	1.05843	100	0.285	700	0.273571	0.275	0.113921	1	5	DG8S323
0.63791	1.08125	97	0.314433	695	0.297842	0.299874	0.221486	1	0	DG8S324
0.298388	1.58857	97	0.036083	695	0.0230218	0.024621	1.08138	1	10	DG8S324
0.890423	0.974756	97	0.216495	695	0.220863	0.220328	0.01888	1	8	DG8S324
0.316602	0.775253	97	0.092784	695	0.116547	0.113636	1.00293	1	6	DG8S324
0.529445	1.16254	97	0.139175	695	0.123022	0.125	0.395457	1	4	DG8S324
0.466028	0.865511	97	0.175258	695	0.197122	0.194444	0.531379	1	2	DG8S324
0.715982	1.1993	97	0.025773	695	0.0215827	0.022086	0.132395	1	12	DG8S324
0.321194	0.785941	93	0.107527	726	0.13292	0.130037	0.984077	1	-4	DG8S332
0.877088	0.954194	93	0.089893	728	0.0730028	0.07265	0.02392	1	4	DG8S332
0.206955	0.790105	93	0.209878	726	0.251377	0.246642	1.5926	1	2	DG8S332
0.530606	0.889209	93	0.215054	726	0.235637	0.233211	0.393231	1	-2	DG8S332
0.042593	1.41167	93	0.327957	726	0.256887	0.264957	4.1115	1	0	DG8S332
0.217107	1.8282	93	0.032258	726	0.0179083	0.019536	1.52339	1	-8	DG8S332
0.710218	1.18902	93	0.037634	726	0.0323691	0.032967	0.13806	1	6	DG8S332
0.055924	0.696624	87	0.224138	539	0.293135	0.283546	3.65431	1	-5	DG8S333
0.055924	1.43549	87	0.775862	539	0.708865	0.716454	3.65431	1	0	DG8S333
0.131157	0.790449	99	0.358588	784	0.414287	0.407879	2.27876	1	1	SG08S100
0.131157	1.2851	99	0.641414	784	0.585733	0.582121	2.27876	1	2	SG08S100
0.016777	0.677563	97	0.386598	387	0.481812	0.46281	5.71957	1	1	SG08S102
0.016777	1.47588	97	0.613402	387	0.518088	0.53719	5.71957	1	2	SG08S102
0.437006	0.878672	100	0.64	390	0.669231	0.663265	0.604132	1	0	SG08S112
0.437006	1.13808	100	0.36	390	0.330769	0.338735	0.804132	1	2	SG08S112
0.377735	0.874364	99	0.520202	700	0.553571	0.549437	0.778059	1	0	SG08S120
0.377735	1.14369	99	0.479798	700	0.446429	0.450563	0.778059	1	2	SG08S120
0.190291	0.801929	98	0.69898	748	0.743298	0.738152	1.71536	1	0	SG08S138
0.190291	1.24699	98	0.30102	748	0.256702	0.261848	1.71536	1	2	SG08S138
0.144357	0.800952	99	0.610101	713	0.565217	0.558498	2.13089	1	0	SG08S15
0.144357	1.24851	99	0.488899	713	0.434783	0.441502	2.13089	1	2	SG08S15
0.157518	1.23984	99	0.60505	701	0.451498	0.468125	1.9979	1	0	SG08S28

FIG. 11D7

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0.157518	0.806684	99	0.494949	701	0.548502	0.541875	1.9979	1	2	SG08S26
0.133952	1.28805	100	0.505	397	0.445844	0.457748	2.2481	1	2	SG08S27
0.133952	0.788614	100	0.495	397	0.554158	0.542254	2.2481	1	1	SG08S27
0.141165	0.787135	97	0.561856	397	0.619847	0.6083	2.18521	1	1	SG08S32
0.141165	1.27043	97	0.438144	397	0.380353	0.3917	2.18521	1	0	SG08S32
0.145678	1.25902	99	0.646465	618	0.592233	0.599721	2.11696	1	1	SG08S35
0.145678	0.794271	99	0.353535	618	0.407767	0.400279	2.11696	1	2	SG08S35
0.212203	0.824463	100	0.45	523	0.498088	0.490369	1.55634	1	1	SG08S38
0.212203	1.21291	100	0.55	523	0.501912	0.509631	1.55634	1	0	SG08S39
0.648445	1.07374	98	0.403061	689	0.388067	0.388183	0.207867	1	0	SG08S42
0.648445	0.931322	98	0.596939	689	0.613933	0.611817	0.207867	1	2	SG08S42
0.305752	1.27727	99	0.126263	610	0.101639	0.105078	1.04894	1	1	SG08S46
0.305752	0.782919	99	0.873737	610	0.898361	0.894922	1.04894	1	3	SG08S46
0.027638	0.711727	96	0.520833	743	0.804307	0.594766	4.8505	1	0	SG08S5
0.027638	1.40503	96	0.479167	743	0.395693	0.405244	4.8505	1	2	SG08S5
0.684951	1.08429	98	0.454082	685	0.438686	0.440613	0.164606	1	2	SG08S50
0.684951	0.939598	98	0.545918	685	0.561314	0.559387	0.164606	1	0	SG08S50
0.006504	0.843485	98	0.4375	381	0.547244	0.525157	7.40506	1	0	SG08S506
0.006504	1.55404	98	0.5625	381	0.452756	0.474843	7.40506	1	2	SG08S506
0.228808	0.816667	99	0.318182	396	0.363636	0.354545	1.44826	1	2	SG08S507
0.228808	1.22449	99	0.681818	396	0.636364	0.645455	1.44826	1	3	SG08S507
0.094402	0.759538	98	0.375	392	0.441327	0.428279	2.79766	1	1	SG08S508
0.094402	1.31659	98	0.625	392	0.558673	0.571721	2.79766	1	3	SG08S508
0.590396	1.11521	96	0.807292	371	0.789757	0.793362	0.289727	1	1	SG08S510
0.590396	0.896691	96	0.192708	371	0.210243	0.206638	0.289727	1	0	SG08S510
0.872081	0.973706	98	0.401042	362	0.407459	0.406114	0.025934	1	1	SG08S511
0.872081	1.027	98	0.598958	362	0.592541	0.593886	0.025934	1	3	SG08S511
0.781	1.04689	95	0.410527	388	0.399485	0.401656	0.077293	1	2	SG08S512
0.781	0.955211	95	0.589474	388	0.600515	0.598344	0.077293	1	1	SG08S512
0.123314	0.781544	100	0.41	392	0.470663	0.458333	2.37472	1	1	SG08S517
0.123314	1.27952	100	0.59	392	0.529337	0.541687	2.37472	1	3	SG08S517
0.091179	1.31381	100	0.625	397	0.559194	0.572435	2.85343	1	1	SG08S520
0.091179	0.781143	100	0.375	397	0.440806	0.427565	2.85343	1	0	SG08S520
0.789875	0.953493	98	0.719388	391	0.7289	0.726894	0.071147	1	2	SG08S8
0.789875	1.04877	98	0.280612	391	0.2711	0.273008	0.071147	1	0	SG08S8
0.128973	0.781948	96	0.442708	380	0.503947	0.491597	2.30483	1	1	SG08S70
0.128973	1.27886	96	0.557292	380	0.496053	0.508403	2.30483	1	3	SG08S70
0.011735	1.47013	99	0.60101	740	0.506081	0.517282	6.35045	1	0	SG08S71
0.011735	0.680212	99	0.398999	740	0.493919	0.482718	6.35045	1	2	SG08S71
0.042417	0.720449	97	0.43299	378	0.51455	0.497895	4.1185	1	3	SG08S73
0.042417	1.38802	97	0.56701	378	0.48545	0.502105	4.1185	1	1	SG08S73
0.085087	0.758593	99	0.409091	394	0.477157	0.463489	2.96496	1	1	SG08S76
0.085087	1.31823	99	0.590909	394	0.522843	0.536511	2.96496	1	2	SG08S76
0.391224	1.1464	99	0.545455	394	0.511421	0.518256	0.735135	1	0	SG08S90
0.391224	0.872294	99	0.454545	394	0.488579	0.481744	0.735135	1	1	SG08S90
0.188081	0.773965	101	0.777228	705	0.81844	0.813275	1.90016	1	1	SG08S93
0.188081	1.29205	101	0.222772	705	0.18156	0.186725	1.90016	1	2	SG08S93
0.159581	0.775408	91	0.28022	362	0.334254	0.3234	1.97819	1	0	SG08S94
0.159581	1.28964	91	0.71978	362	0.665746	0.6766	1.97819	1	2	SG08S94
0.026638	1.40786	99	0.49495	586	0.41041	0.422628	4.91413	1	2	SG08S95
0.026638	0.710299	99	0.505051	586	0.58959	0.577372	4.91413	1	3	SG08S95
0.504013	1.10942	100	0.605	613	0.579935	0.58345	0.446476	1	2	SG08S96
0.504013	0.901372	100	0.395	613	0.420085	0.41665	0.446476	1	3	SG08S96
0.892559	1.0344	100	0.9	713	0.898914	0.897294	0.018243	1	0	SG08S97
0.892559	0.866742	100	0.1	713	0.103068	0.102706	0.018243	1	1	SG08S97

FIG. 11D8

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Appendix 3: Output of association with bipolar disorder without panic disorder

P-value	Relative Risk	Number of Affecteds	Frequency in Affecteds	Number of Controls	Frequency in Controls	Frequency under Null Hypothesis	Chi-square Statistic	Information	Allele	Marker
0.363622	0.836763	60	0.618667	811	0.65783	0.654994	0.825344	1	4	AC022239-5
0.305708	1.24469	60	0.283333	811	0.24106	0.243972	1.04913	1	0	AC022239-5
0.977998	1.0095	60	0.083333	811	0.082814	0.082664	0.0007606	1	8	AC022239-5
0.69447	1.35783	60	0.018667	811	0.012331	0.012629	0.164289	1	-4	AC022239-5
0.318991	1.51E-11	60	6.55E-14	811	0.004316	0.004018	1.00132	1	-8	AC022239-5
0.512664	1.39E-10	60	2.58E-13	811	0.00185	0.001722	0.428626	1	-12	AC022239-5
0.111109	1.59559	55	0.154545	574	0.102787	0.107313	2.53838	1	12	AC068974-2
0.723343	1.08063	55	0.3	574	0.283972	0.285374	0.125312	1	14	AC068974-2
0.287331	0.805706	55	0.390909	574	0.44338	0.438792	1.13208	1	0	AC068974-2
0.604328	1.26692	55	0.054545	574	0.043554	0.044515	0.28852	1	16	AC068974-2
0.335492	0.526588	55	0.018182	574	0.033972	0.032591	0.927581	1	6	AC068974-2
0.432112	0.70124	55	0.045455	574	0.083589	0.082003	0.61714	1	10	AC068974-2
0.225515	1.51E-18	55	1.06E-18	574	0.006959	0.006359	1.46893	1	20	AC068974-2
0.121856	4.11E-12	55	4.71E-14	574	0.011324	0.010334	2.39201	1	8	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.000871	0.000795	0.18308	1	15	AC068974-2
0.037867	5.33647	55	0.027273	574	0.005226	0.007154	4.311	1	18	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.000871	0.000795	0.18308	1	2	AC068974-2
0.335342	3.50155	55	0.009091	574	0.002813	0.00318	0.828159	1	-2	AC068974-2
0.66874	3.17E-10	55	2.76E-13	574	0.000871	0.000795	0.18308	1	13	AC068974-2
0.59902	1.14583	58	0.172414	780	0.153846	0.155131	0.276476	1	0	AF131215-1
0.299873	0.805799	58	0.293104	780	0.339744	0.338516	1.07476	1	2	AF131215-1
0.998415	1.00041	58	0.310345	780	0.310256	0.310263	3.94E-06	1	-2	AF131215-1
0.372986	0.552631	58	0.017241	780	0.030769	0.029833	0.793693	1	22	AF131215-1
0.562829	1.45259	58	0.025862	780	0.017949	0.018496	0.334829	1	-4	AF131215-1
0.699929	0.821431	58	0.034483	780	0.041687	0.04117	0.148546	1	8	AF131215-1
0.320657	1.45959	58	0.077586	780	0.054487	0.056086	0.986266	1	4	AF131215-1
0.284411	2.04424	58	0.025862	780	0.012821	0.013723	1.09934	1	-6	AF131215-1
0.723982	1.18777	58	0.043104	780	0.036539	0.036993	0.124709	1	10	AF131215-1
0.704833	4.37E-12	58	2.80E-15	780	0.000641	0.000597	0.143493	1	6	AF131215-1
0.592101	1.18E-14	58	1.52E-17	780	0.001282	0.001193	0.287074	1	12	AF131215-1
0.697802	0.929521	61	0.516394	780	0.534615	0.533294	0.150769	1	0	AF131215-2
0.579915	1.11131	61	0.426229	780	0.400641	0.402497	0.306372	1	4	AF131215-2
0.690189	0.844827	61	0.04918	780	0.057692	0.057075	0.158881	1	8	AF131215-2
0.676324	1.60332	61	0.008197	780	0.005128	0.005351	0.174294	1	-4	AF131215-2
0.501289	1.79E-11	61	3.45E-14	780	0.001923	0.001784	0.452205	1	-8	AF131215-2
0.478237	0.870426	58	0.396552	795	0.430189	0.427902	0.502881	1	0	AF131215-4
0.184845	1.29107	58	0.5	795	0.438478	0.440787	1.75824	1	14	AF131215-4
0.634514	0.838932	58	0.088968	795	0.081132	0.080305	0.225988	1	12	AF131215-4
0.12748	0.265477	58	0.008621	795	0.02856	0.028136	2.32292	1	8	AF131215-4
0.407604	1.7323	58	0.025862	795	0.015094	0.015827	0.68578	1	16	AF131215-4
0.367529	8.82E-12	58	2.58E-14	795	0.003774	0.003517	0.848552	1	18	AF131215-4
0.401027	1.09E-10	58	3.45E-13	795	0.003145	0.002931	0.705248	1	10	AF131215-4
0.70741	1.51E-13	58	9.51E-17	795	0.000629	0.000586	0.140878	1	4	AF131215-4
0.096302	1.76706	57	0.105263	801	0.082422	0.085268	2.76575	1	-6	AF188029-1
0.142988	0.734164	57	0.280702	801	0.347066	0.342657	2.14551	1	0	AF188029-1
0.475823	0.83072	57	0.157895	801	0.184145	0.182401	0.508884	1	-8	AF188029-1
0.832486	1.05185	57	0.210526	801	0.202247	0.202797	0.0447331	1	-4	AF188029-1
0.965978	1.02281	57	0.035088	801	0.034332	0.034382	0.0018193	1	2	AF188029-1
0.434288	0.590808	57	0.017544	801	0.029338	0.028555	0.611329	1	-12	AF188029-1
0.261327	1.43339	57	0.114035	801	0.082397	0.084499	1.28172	1	-2	AF188029-1
0.184115	1.67473	57	0.078947	801	0.048689	0.050699	1.76409	1	-10	AF188029-1
0.710751	3.94E-10	57	2.46E-13	801	0.000624	0.000583	0.137528	1	6	AF188029-1
0.184433	3.83E-11	57	3.20E-13	801	0.008739	0.008159	1.93298	1	4	AF188029-1
0.621405	1.10038	58	0.448276	804	0.424751	0.426334	0.243897	1	0	AF188029-10
0.127551	0.736929	58	0.336207	804	0.407338	0.402552	2.32207	1	2	AF188029-10
0.778228	1.12275	58	0.060345	804	0.054105	0.054524	0.0793184	1	8	AF188029-10
0.099089	1.68878	58	0.12069	804	0.075249	0.078306	2.72014	1	4	AF188029-10
0.901714	0.937651	58	0.034483	804	0.036692	0.036543	0.0152515	1	-2	AF188029-10
0.697484	1.96E-10	58	2.46E-13	804	0.001244	0.00116	0.278792	1	-4	AF188029-10
0.708924	1.64E-10	58	1.02E-13	804	0.000622	0.00058	0.139354	1	6	AF188029-10
0.579137	1.14863	56	0.196429	795	0.175472	0.176851	0.307631	1	0	AF188029-12
0.985476	1.00657	56	0.080357	795	0.079874	0.079906	0.0003314	1	4	AF188029-12
0.593852	0.900594	56	0.535714	795	0.561635	0.559929	0.284369	1	-12	AF188029-12
0.978505	1.0072	56	0.160714	795	0.159748	0.159812	0.0007259	1	-4	AF188029-12
0.543585	2.03734	56	0.008929	795	0.004403	0.0047	0.368935	1	12	AF188029-12
0.938849	0.945455	56	0.017857	795	0.018688	0.018801	0.0058853	1	8	AF188029-12
0.835837	0.961074	60	0.575	809	0.584672	0.584005	0.0429404	1	0	AF188029-7
0.691804	1.07951	60	0.408333	809	0.389988	0.391254	0.15714	1	-4	AF188029-7

FIG. 11E1

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0.81474	0.791399	80	0.008333	809	0.010507	0.010357	0.0549035	1	2	AF188029-7
0.142015	3.24E-12	80	3.03E-14	809	0.009271	0.008631	2.15599	1	-2	AF188029-7
0.417341	2.71092	80	0.008333	809	0.00309	0.003452	0.657791	1	4	AF188029-7
0.449054	2.42E-10	80	6.00E-13	809	0.002472	0.002302	0.573038	1	6	AF188029-7
0.417638	1.20832	40	0.525	449	0.477728	0.481595	0.656957	1	0	AF287957-1
0.058137	0.622981	40	0.2875	449	0.393098	0.384458	3.58975	1	-6	AF287957-1
0.033923	3.45491	40	0.0625	449	0.018931	0.022495	4.4988	1	4	AF287957-1
0.239885	0.464266	40	0.025	449	0.052339	0.050102	1.38127	1	-4	AF287957-1
0.149224	2.4349	40	0.05	449	0.021158	0.023517	2.08017	1	2	AF287957-1
0.345145	1.90477	40	0.0375	449	0.020045	0.021472	0.891226	1	-2	AF287957-1
0.767846	0.745149	40	0.0125	449	0.016704	0.01638	0.0871392	1	-14	AF287957-1
0.368674	1.46881	61	0.057377	867	0.039792	0.040848	0.808129	1	-12	D8S1130
0.16812	1.35239	61	0.303279	867	0.246251	0.25	1.89983	1	4	D8S1130
0.091202	0.842198	61	0.131148	867	0.190311	0.188422	2.85304	1	0	D8S1130
0.699451	1.12856	61	0.106557	867	0.095732	0.096444	0.149044	1	8	D8S1130
0.868403	0.963438	61	0.221312	867	0.227797	0.227371	0.0274522	1	-8	D8S1130
0.47914	0.825683	61	0.131148	867	0.154556	0.153017	0.500819	1	-4	D8S1130
0.941492	0.962366	61	0.032787	867	0.034025	0.033944	0.0053868	1	12	D8S1130
0.857508	0.834711	61	0.008197	867	0.008804	0.009698	0.032237	1	16	D8S1130
0.522835	1.35E-11	61	2.34E-14	867	0.00173	0.001818	0.408298	1	2	D8S1130
0.019548	1.49070	61	0.008196	867	5.64E-08	0.000539	5.4518	1	20	D8S1130
0.825877	0.954251	60	0.266667	839	0.275924	0.275308	0.0483969	1	0	D8S1469
0.704363	1.07443	60	0.483333	839	0.465435	0.46663	0.143973	1	4	D8S1469
0.450413	1.21164	60	0.175	839	0.148987	0.150723	0.569613	1	8	D8S1469
0.270889	2.12565	60	0.025	839	0.011919	0.012792	1.21224	1	12	D8S1469
0.191474	0.538409	60	0.033333	839	0.060191	0.058398	1.70624	1	3	D8S1469
0.211151	0.449292	60	0.016867	839	0.036353	0.035039	1.56352	1	-4	D8S1469
0.599038	3.19E-12	60	3.80E-15	839	0.001192	0.001112	0.276449	1	7	D8S1469
0.864984	1.03499	52	0.480769	845	0.472189	0.472687	0.0289198	1	0	D8S1695
0.355556	0.793651	52	0.192308	845	0.230769	0.22854	0.85353	1	8	D8S1695
0.23416	1.54304	52	0.096154	845	0.064497	0.066332	1.41541	1	6	D8S1695
0.71935	1.15974	52	0.067308	845	0.05858	0.059086	0.129116	1	10	D8S1695
0.749006	0.80158	52	0.105769	845	0.115976	0.115385	0.102369	1	4	D8S1695
0.834287	1.13769	52	0.028848	845	0.025444	0.025641	0.0437674	1	12	D8S1695
0.885143	0.900869	52	0.019231	845	0.021302	0.021182	0.0208667	1	2	D8S1695
0.602845	1.81338	52	0.009615	845	0.005325	0.005574	0.270728	1	14	D8S1695
0.36004	8.49E-11	52	3.53E-13	845	0.004142	0.003902	0.837755	1	16	D8S1695
0.624919	5.76E-12	52	6.83E-15	845	0.001183	0.001115	0.239014	1	-4	D8S1695
0.729607	2.79E-14	52	1.65E-17	845	0.000592	0.000557	0.119473	1	9	D8S1695
0.80841	1.0553	59	0.254237	643	0.244168	0.245014	0.0587953	1	34	D8S1721
0.158461	0.409152	59	0.016949	643	0.040436	0.038462	1.98885	1	36	D8S1721
0.461971	0.864658	59	0.372881	643	0.407465	0.404558	0.541116	1	0	D8S1721
0.595841	1.15963	59	0.144068	643	0.12875	0.128205	0.281315	1	2	D8S1721
0.432878	1.27283	59	0.118644	643	0.095845	0.097578	0.615089	1	4	D8S1721
0.512395	0.541025	59	0.008475	643	0.015552	0.014957	0.429173	1	8	D8S1721
0.077508	2.0411	59	0.076271	643	0.03888	0.042023	3.1164	1	24	D8S1721
0.691622	0.678413	59	0.008475	643	0.012442	0.012108	0.157335	1	32	D8S1721
0.129906	3.04E-15	59	3.10E-17	643	0.010109	0.009259	2.29362	1	38	D8S1721
0.348332	7.27E-11	59	2.84E-13	643	0.003888	0.003561	0.879525	1	26	D8S1721
0.675145	8.24E-11	59	6.41E-14	643	0.000778	0.000712	0.175643	1	6	D8S1721
0.675145	8.24E-11	59	6.41E-14	643	0.000778	0.000712	0.175643	1	-4	D8S1721
0.467735	8.48E-11	59	1.51E-13	643	0.002333	0.002137	0.527321	1	30	D8S1721
0.676145	8.24E-11	59	6.41E-14	643	0.000778	0.000712	0.175643	1	-2	D8S1721
0.06143	0.704028	62	0.532258	868	0.617783	0.612069	3.49835	1	0	D8S1759
0.634574	1.15865	62	0.104839	868	0.091801	0.092672	0.225909	1	2	D8S1759
0.683338	0.750997	62	0.016129	868	0.021363	0.021013	0.186393	1	6	D8S1759
0.225795	1.52383	62	0.08671	868	0.060046	0.061961	1.46715	1	4	D8S1759
0.149653	1.48479	62	0.16129	868	0.116051	0.119073	2.07579	1	12	D8S1759
0.852221	1.07889	62	0.056452	868	0.05254	0.052802	0.0347024	1	10	D8S1759
0.922244	1.07566	62	0.016129	868	0.015012	0.015086	0.0095271	1	14	D8S1759
0.89257	0.871956	62	0.008065	868	0.009238	0.009159	0.0182392	1	16	D8S1759
0.880877	1.11934	62	0.016129	868	0.014434	0.014547	0.0224573	1	8	D8S1759
0.519328	3.81E-10	62	6.62E-13	868	0.001732	0.001616	0.415229	1	-2	D8S1759
0.458297	1.18012	43	0.5	702	0.458889	0.481074	0.654962	1	0	D8S1825
0.24022	0.568227	43	0.046512	702	0.07906	0.077181	1.3793	1	8	D8S1825
0.960318	1.01672	43	0.127907	702	0.126068	0.126174	0.0024755	1	10	D8S1825
0.316577	0.741137	43	0.151163	702	0.193732	0.191275	1.00304	1	6	D8S1825
0.222186	1.48877	43	0.151163	702	0.106838	0.109396	1.49019	1	2	D8S1825
0.361023	2.00E-14	43	1.00E-16	702	0.004986	0.004698	0.834332	1	-2	D8S1825
0.647625	1.42961	43	0.023256	702	0.018382	0.018779	0.208908	1	4	D8S1825
0.440285	7.53E-12	43	2.69E-14	702	0.003561	0.003355	0.595538	1	-1	D8S1825
0.195893	8.13E-12	43	8.19E-14	702	0.009972	0.009396	1.67273	1	12	D8S1825
0.730184	1.47E-10	43	1.05E-13	702	0.000712	0.000671	0.118943	1	14	D8S1825
0.753881	1.07363	44	0.375	841	0.358502	0.359322	0.0982884	1	4	D8S265
0.481601	1.22653	44	0.181818	841	0.153389	0.154802	0.495235	1	0	D8S265
0.078936	9.89E-13	44	1.80E-14	841	0.017838	0.016949	3.08667	1	6	D8S265
0.395095	0.684796	44	0.056818	841	0.080858	0.079661	0.723203	1	-5	D8S265
0.897034	0.96109	44	0.147727	841	0.152794	0.152542	0.0167466	1	2	D8S265
0.317205	0.843406	44	0.056818	841	0.085812	0.084181	1.00044	1	18	D8S265
0.172352	1.82619	44	0.079546	841	0.045184	0.046893	1.86236	1	12	D8S265
0.666891	1.17212	44	0.102273	841	0.088585	0.089286	0.18526	1	14	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.000595	0.000565	0.102022	1	-3	D8S265

FIG. 11E2

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0.186827	1.32E-11	44	1.35E-13	841	0.010107	0.009605	1.74246	1	16	D8S265
0.474836	1.14E-12	44	3.40E-15	841	0.002973	0.002825	0.5107	1	8	D8S265
0.579995	3.04E-11	44	7.04E-14	841	0.001784	0.001695	0.308242	1	10	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.000595	0.000565	0.102022	1	20	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.000595	0.000565	0.102022	1	1	D8S265
0.749417	4.63E-12	44	2.76E-15	841	0.000595	0.000565	0.102022	1	-4	D8S265
0.993422	0.996403	33	0.090909	762	0.091207	0.091195	8.80E-05	1	0	D8S351
0.305742	1.35317	33	0.257576	762	0.204088	0.208289	1.04898	1	18	D8S351
0.430602	1.26016	33	0.257576	762	0.215879	0.21761	0.821199	1	2	D8S351
0.918456	0.964886	33	0.151515	762	0.156168	0.155975	0.0104814	1	6	D8S351
0.215344	1.06E-11	33	1.26E-13	762	0.011811	0.011321	1.63513	1	10	D8S351
0.603284	0.768725	33	0.060606	762	0.077428	0.07673	0.270101	1	8	D8S351
0.173787	0.31956	33	0.015152	762	0.045932	0.044854	1.84997	1	20	D8S351
0.400003	0.624339	33	0.045455	762	0.070868	0.089811	0.708316	1	4	D8S351
0.634597	1.22072	33	0.106061	762	0.088583	0.089308	0.225878	1	18	D8S351
0.092623	1.50E-11	33	3.32E-13	762	0.021654	0.020755	2.82819	1	14	D8S351
0.274837	2.84E-12	33	2.63E-14	762	0.009186	0.008805	1.19245	1	12	D8S351
0.33331	3.33405	33	0.015152	762	0.004593	0.005031	0.935995	1	-2	D8S351
0.56008	5.87E-14	33	1.54E-16	762	0.002625	0.002516	0.339601	1	22	D8S351
0.448788	0.854838	58	0.301724	825	0.335768	0.333522	0.573711	1	-8	D8S503
0.321893	1.2189	58	0.37931	825	0.333939	0.33692	0.981241	1	0	D8S503
0.980215	1.00833	58	0.172414	825	0.171515	0.171574	0.000615	1	-2	D8S503
0.035929	0.280408	58	0.017241	825	0.05697	0.05438	4.40048	1	-4	D8S503
0.382595	1.49718	58	0.051724	825	0.035152	0.03624	0.762346	1	2	D8S503
0.350094	1.42442	58	0.077586	825	0.055758	0.057191	0.873115	1	-8	D8S503
0.622881	2.30E-11	58	4.19E-14	825	0.001818	0.001699	0.40801	1	-10	D8S503
0.26815	1.24E-11	58	8.78E-14	825	0.005455	0.005096	1.22619	1	4	D8S503
0.368136	1.20E-13	58	4.38E-16	825	0.003636	0.003398	0.816738	1	-12	D8S503
0.403745	0.855197	62	0.548387	876	0.588758	0.584222	0.697146	1	2	D8S516
0.385815	1.21411	62	0.233871	876	0.200913	0.203092	0.752091	1	4	D8S516
0.871698	0.948984	62	0.08871	876	0.093037	0.092751	0.0260839	1	0	D8S516
0.907354	1.03746	62	0.098774	876	0.093607	0.093817	0.0135438	1	-2	D8S516
0.781509	0.74155	62	0.008085	876	0.010845	0.010681	0.092112	1	-4	D8S516
0.075196	5.94E-18	62	7.90E-20	876	0.013128	0.01226	3.16579	1	6	D8S516
0.003648	14.4548	62	0.024194	876	0.001712	0.003198	8.45133	1	8	D8S516
0.371238	1.19618	57	0.403509	663	0.361237	0.364583	0.799518	1	6	D8S520
0.402548	0.813844	57	0.184211	663	0.217195	0.214583	0.7007	1	8	D8S520
0.027895	4.30E-13	57	9.62E-15	663	0.02187	0.020139	4.83455	1	10	D8S520
0.62838	1.15818	57	0.122807	663	0.107843	0.109028	0.234292	1	0	D8S520
0.577855	0.791186	57	0.052632	663	0.085611	0.084583	0.309715	1	-10	D8S520
0.077741	1.65417	57	0.157895	663	0.10181	0.10625	3.1115	1	4	D8S520
0.222305	1.57E-11	57	1.07E-13	663	0.008787	0.00625	1.48943	1	-12	D8S520
0.353393	0.726123	57	0.078947	663	0.105581	0.103472	0.861236	1	2	D8S520
0.142149	5.08E-11	57	5.03E-13	663	0.009804	0.009028	2.15454	1	-2	D8S520
0.585574	2.82E-12	57	4.26E-15	663	0.001508	0.001389	0.330144	1	12	D8S520
0.684583	2.16E-11	57	1.83E-14	663	0.000754	0.000694	0.165012	1	9	D8S520
0.267119	0.808015	58	0.474138	840	0.527381	0.523842	1.23148	1	0	D8S542
0.893055	0.972736	58	0.318965	840	0.325	0.32461	0.018074	1	2	D8S542
0.084254	1.53528	58	0.208897	840	0.145238	0.14922	2.98086	1	4	D8S542
0.626596	5.83E-11	58	1.04E-13	840	0.001786	0.00167	0.400955	1	-2	D8S542
0.714754	5.94E-12	58	3.54E-15	840	0.000595	0.000557	0.133575	1	-12	D8S542
0.930318	1.03058	55	0.090909	814	0.088452	0.088608	0.0076471	1	-8	D8S550
0.993832	1.00238	55	0.118182	814	0.117936	0.117952	5.98E-05	1	12	D8S550
0.707978	0.920186	55	0.263636	814	0.280098	0.279058	0.140305	1	14	D8S550
0.305257	0.733118	55	0.109091	814	0.14312	0.140967	1.05109	1	-2	D8S550
0.076296	2.41396	55	0.054545	814	0.023342	0.025317	3.14209	1	8	D8S550
0.204892	1.74582	55	0.083636	814	0.037469	0.039125	1.60716	1	18	D8S550
0.77785	0.894133	55	0.083636	814	0.070639	0.070196	0.0795925	1	-8	D8S550
0.384808	0.716726	55	0.083636	814	0.086609	0.085155	0.755287	1	16	D8S550
0.412013	1.36158	55	0.081818	814	0.081425	0.082718	0.872983	1	0	D8S550
0.719432	1.14932	55	0.072727	814	0.063882	0.064442	0.129038	1	10	D8S550
0.277346	3.77E-11	55	2.09E-13	814	0.005528	0.005178	1.18005	1	2	D8S550
0.900811	1.09808	55	0.018182	814	0.016585	0.016686	0.0155975	1	20	D8S550
0.608964	2.02E-13	55	2.48E-16	814	0.001229	0.001151	0.261687	1	6	D8S550
0.469274	1.17E-12	55	2.89E-15	814	0.002457	0.002302	0.523685	1	22	D8S550
0.608984	2.02E-13	55	2.48E-16	814	0.001229	0.001151	0.261687	1	4	D8S550
0.131551	0.579512	16	0.46875	391	0.803581	0.59828	2.2741	1	1	DG00AAHBG
0.131551	1.72559	16	0.53125	391	0.398419	0.40172	2.2741	1	2	DG00AAHBG
0.285177	0.773002	41	0.846341	725	0.702759	0.699739	1.14225	1	2	DG00AAHBH
0.285177	1.29366	41	0.353659	725	0.297241	0.300281	1.14225	1	1	DG00AAHBH
0.382271	0.808631	38	0.831579	811	0.680025	0.677856	0.763387	1	3	DG00AAHBI
0.382271	1.23972	38	0.368421	811	0.319975	0.322144	0.763387	1	1	DG00AAHBI
0.278007	1.3071	52	0.240385	531	0.194915	0.198971	1.17681	1	0	DG8S117
0.278007	0.765052	52	0.759615	531	0.805085	0.801029	1.17681	1	9	DG8S117
0.971671	0.988415	62	0.91129	826	0.912228	0.912162	0.0012612	1	0	DG8S118
0.971671	1.01172	62	0.08871	826	0.087772	0.087838	0.0012612	1	5	DG8S118
0.335458	0.818662	52	0.394231	604	0.442881	0.439024	0.927712	1	0	DG8S127
0.888013	0.956222	52	0.116386	604	0.120033	0.119665	0.01983	1	6	DG8S127
0.258737	1.26033	52	0.490384	604	0.432947	0.4375	1.2755	1	1	DG8S127
0.362993	1.54E-12	52	6.38E-15	604	0.004139	0.003811	0.827511	1	2	DG8S127
0.847624	1.04508	56	0.758929	646	0.750774	0.751425	0.0369218	1	0	DG8S128
0.847624	0.956886	56	0.241071	646	0.248226	0.248575	0.0369218	1	4	DG8S128

FIG. 11E3

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0.893296	0.973154	56	0.366072	772	0.372409	0.371981	0.0179922	1	4	DG8S130
0.256885	0.800914	56	0.482143	772	0.537565	0.533816	1.28547	1	0	DG8S130
0.169927	1.8395	56	0.0625	772	0.034974	0.036836	1.88359	1	-16	DG8S130
0.540972	1.63315	56	0.017857	772	0.01101	0.011473	0.373742	1	-4	DG8S130
0.208801	1.73918	56	0.0625	772	0.036917	0.038647	1.57972	1	8	DG8S130
0.358847	7.02E-11	56	2.74E-13	772	0.003888	0.003623	0.841924	1	-12	DG8S130
0.173265	6.94598	56	0.008929	772	0.001295	0.001812	1.85446	1	12	DG8S130
0.516655	1.44E-10	56	2.80E-13	772	0.001943	0.001812	0.420566	1	-8	DG8S130
0.94086	0.980424	60	0.85	739	0.852503	0.852315	0.0055041	1	0	DG8S134
0.877445	0.959107	60	0.141667	739	0.14682	0.146433	0.0237803	1	4	DG8S134
0.109039	12.4118	60	0.008333	739	0.000677	0.001252	2.5681	1	2	DG8S134
1	1	57	0.657895	778	0.657895	0.657895	0	1	0	DG8S136
0.648818	1.1734	57	0.087719	779	0.075738	0.076555	0.207393	1	-8	DG8S136
0.605035	1.24131	57	0.061404	779	0.050064	0.050837	0.267469	1	2	DG8S136
0.359938	1.41477	57	0.078947	779	0.057125	0.058612	0.838111	1	-4	DG8S136
0.113172	0.4357	57	0.026316	779	0.058408	0.05622	2.50935	1	4	DG8S136
0.112226	0.373997	57	0.017544	779	0.045571	0.04366	2.52259	1	6	DG8S136
0.812303	0.868891	57	0.026316	779	0.030167	0.029904	0.0563853	1	-2	DG8S136
0.243919	1.98701	57	0.035088	779	0.017972	0.019139	1.3578	1	8	DG8S136
0.400351	7.17E-13	57	2.31E-15	779	0.003209	0.00299	0.707272	1	-8	DG8S136
0.594973	6.71E-12	57	8.62E-15	779	0.001284	0.001196	0.282845	1	10	DG8S136
0.707013	8.09E-11	57	5.20E-14	779	0.000842	0.000598	0.141279	1	-10	DG8S136
0.283998	4.58704	57	0.008772	779	0.001926	0.002392	1.30118	1	-14	DG8S136
0.604575	0.779604	11	0.272727	234	0.324786	0.322449	0.268151	1	-2	DG8S137
0.33397	1.95338	11	0.136363	234	0.074786	0.077551	0.933443	1	2	DG8S137
0.80172	0.880952	11	0.045455	234	0.051282	0.05102	0.0152496	1	10	DG8S137
0.368795	0.458876	11	0.045455	234	0.084017	0.091837	0.711955	1	4	DG8S137
0.291975	1.90022	11	0.181818	234	0.104701	0.108163	1.11049	1	6	DG8S137
0.980863	0.983635	11	0.090909	234	0.094017	0.093878	0.0024079	1	-4	DG8S137
0.831526	0.768256	11	0.181818	234	0.224359	0.222449	0.229998	1	0	DG8S137
0.409548	2.73812	11	0.045455	234	0.017094	0.018367	0.680111	1	12	DG8S137
0.687845	3.71E-10	11	1.59E-12	234	0.004274	0.004082	0.184133	1	18	DG8S137
0.781687	2.17E-10	11	4.64E-13	234	0.002137	0.002041	0.0919703	1	14	DG8S137
0.543528	7.21E-11	11	6.21E-13	234	0.008547	0.008163	0.36904	1	8	DG8S137
0.368532	0.7517	55	0.1	761	0.128778	0.128838	0.815387	1	-1	DG8S138
0.356408	1.33812	55	0.9	761	0.870565	0.872549	0.850512	1	0	DG8S138
0.708673	1.75E-12	55	1.15E-15	761	0.000857	0.000613	0.139606	1	1	DG8S138
0.887346	1.03081	49	0.408163	585	0.400855	0.40142	0.0200685	1	0	DG8S147
0.900469	0.973571	49	0.591837	585	0.598291	0.597792	0.0156423	1	2	DG8S147
0.688292	4.37E-11	49	3.73E-14	585	0.000655	0.000789	0.16094	1	1	DG8S147
0.636815	0.830118	59	0.059322	694	0.070605	0.069721	0.223198	1	-4	DG8S148
0.545287	1.13556	59	0.305085	694	0.278818	0.280876	0.365829	1	2	DG8S148
0.245471	0.761006	59	0.194915	694	0.241354	0.237716	1.34889	1	-2	DG8S148
0.633681	1.09821	59	0.398305	694	0.376081	0.377822	0.227103	1	0	DG8S148
0.89712	1.07176	59	0.033898	694	0.0317	0.031873	0.0167185	1	4	DG8S148
0.023917	1.09517	59	0.008474	694	7.80E-08	0.000864	5.10087	1	6	DG8S148
0.567669	1.72E-10	59	2.48E-13	694	0.001441	0.001328	0.326599	1	-17	DG8S148
0.263405	1.34158	31	0.5	473	0.427081	0.431548	1.25077	1	-2	DG8S153
0.857201	0.928667	31	0.112903	473	0.120507	0.12004	0.0323776	1	0	DG8S153
0.165944	1.45E-15	31	2.34E-17	473	0.015856	0.014881	1.91921	1	-6	DG8S153
0.99324	0.994838	31	0.048387	473	0.048628	0.048611	7.18E-05	1	2	DG8S153
0.960209	1.01975	31	0.129032	473	0.12885	0.126984	0.0024892	1	6	DG8S153
0.072949	4.56E-12	31	1.24E-13	473	0.028427	0.024802	3.21539	1	14	DG8S153
0.332639	0.666577	31	0.098774	473	0.138478	0.135913	0.938597	1	8	DG8S153
0.743331	0.823731	31	0.048387	473	0.05814	0.05754	0.10722	1	10	DG8S153
0.410177	1.7307	31	0.048387	473	0.028541	0.029762	0.678288	1	4	DG8S153
0.425003	1.20E-11	31	6.38E-14	473	0.005285	0.00496	0.63844	1	12	DG8S153
0.296624	3.88065	31	0.018129	473	0.004228	0.00496	1.08931	1	-4	DG8S153
0.735263	1.10639	27	0.333334	453	0.311258	0.3125	0.114334	1	4	DG8S155
0.488737	1.35035	27	0.12963	453	0.099338	0.101042	0.479305	1	8	DG8S155
0.975996	0.985593	27	0.092592	453	0.093819	0.09375	0.0009053	1	2	DG8S155
0.304898	0.700246	27	0.185185	453	0.245033	0.241667	1.05352	1	6	DG8S155
0.742857	0.724364	27	0.018519	453	0.025386	0.025	0.107632	1	14	DG8S155
0.823623	1.10598	27	0.111111	453	0.101545	0.102083	0.0496789	1	0	DG8S155
0.684405	0.767116	27	0.055556	453	0.069538	0.06875	0.16521	1	10	DG8S155
0.799212	0.832691	27	0.037037	453	0.04415	0.04375	0.0847029	1	12	DG8S155
0.07759	17.0753	27	0.018518	453	0.001104	0.002083	3.11467	1	-16	DG8S155
0.555291	3.06E-11	27	1.02E-13	453	0.003311	0.003125	0.347924	1	-10	DG8S155
0.73358	5.32E-10	27	5.87E-13	453	0.001104	0.001042	0.11585	1	-2	DG8S155
0.565291	3.06E-11	27	1.02E-13	453	0.003311	0.003125	0.347924	1	18	DG8S155
0.07759	17.0753	27	0.018518	453	0.001104	0.002083	3.11467	1	-12	DG8S155
0.190234	1.29628	58	0.446429	777	0.383526	0.387755	1.7158	1	6	DG8S156
0.181363	0.75991	58	0.5	777	0.568211	0.563625	1.9614	1	0	DG8S156
0.810832	1.13757	58	0.035714	777	0.031532	0.031813	0.0572898	1	-6	DG8S156
0.249986	4.65783	58	0.008929	777	0.001931	0.002401	1.32338	1	3	DG8S156
0.58893	0.599689	58	0.008929	777	0.014801	0.014406	0.290454	1	9	DG8S156
0.271315	0.652005	51	0.911765	556	0.940648	0.938221	1.21009	1	0	DG8S159
0.373416	1.47229	51	0.068627	556	0.047682	0.049423	0.792264	1	-2	DG8S159
0.518798	1.69077	51	0.019608	556	0.011691	0.012356	0.414294	1	2	DG8S159
0.833341	0.959682	58	0.413793	735	0.42381	0.423077	0.0442757	1	0	DG8S161
0.833341	1.04201	58	0.586207	735	0.576919	0.576923	0.0442757	1	2	DG8S161
0.904333	1.02303	60	0.475	815	0.469325	0.469714	0.0144454	1	0	DG8S163

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0.904333	0.977488	60	0.525	815	0.530675	0.530286	0.0144454	1	3	DG8S163
0.368949	1.21796	48	0.375	759	0.33004	0.332714	0.807201	1	0	DG8S170
0.473152	0.8554	48	0.614583	759	0.650856	0.648699	0.514805	1	2	DG8S170
0.695445	0.684212	48	0.010417	759	0.015152	0.01487	0.153254	1	-4	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.001318	0.001239	0.245444	1	-19	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.001318	0.001239	0.245444	1	-8	DG8S170
0.620301	9.85E-13	48	1.30E-15	759	0.001318	0.001239	0.245444	1	-2	DG8S170
0.114214	0.728131	57	0.359649	643	0.435459	0.429286	2.48492	1	14	DG8S177
0.909639	1.1292	57	0.008772	643	0.007776	0.007857	0.0128809	1	20	DG8S177
0.314179	1.2498	57	0.280702	643	0.237947	0.241429	1.01303	1	12	DG8S177
0.567176	0.817801	57	0.078948	643	0.084868	0.093571	0.32743	1	18	DG8S177
0.559832	2.02E-10	57	3.15E-13	643	0.001555	0.001429	0.338998	1	2	DG8S177
0.453995	1.32747	57	0.078947	643	0.060653	0.062143	0.560659	1	0	DG8S177
0.682838	1.13278	57	0.140351	643	0.125972	0.127143	0.190095	1	16	DG8S177
0.387023	1.49758	57	0.052632	643	0.03577	0.037143	0.748274	1	10	DG8S177
0.680657	1.09408	62	0.548077	622	0.525723	0.527448	0.192727	1	0	DG8S179
0.680657	0.914005	62	0.451923	622	0.474277	0.472552	0.192727	1	7	DG8S179
0.28668	0.784423	57	0.22807	625	0.2736	0.269795	1.13515	1	10	DG8S181
0.5118	0.861652	57	0.236842	625	0.2648	0.262463	0.430386	1	12	DG8S181
0.099905	0.561959	57	0.070176	625	0.1184	0.11437	2.70706	1	4	DG8S181
0.585288	1.19538	57	0.105263	625	0.0896	0.090909	0.297763	1	0	DG8S181
0.170625	1.43463	57	0.18421	625	0.136	0.140029	1.87745	1	8	DG8S181
0.139686	2.48889	57	0.035088	625	0.0144	0.016129	2.18142	1	18	DG8S181
0.877448	0.911411	57	0.026316	625	0.0288	0.028592	0.0237791	1	18	DG8S181
0.249849	1.52807	57	0.087719	625	0.0692	0.061584	1.32415	1	14	DG8S181
0.082771	5.56247	57	0.017544	625	0.0032	0.004399	3.00984	1	-2	DG8S181
0.774579	1.3739	57	0.008772	625	0.0064	0.006598	0.0820192	1	2	DG8S181
0.268346	4.85E-12	57	2.62E-14	625	0.0058	0.005132	1.22518	1	6	DG8S181
0.154481	0.604252	44	0.875	818	0.820538	0.818213	2.02743	1	0	DG8S182
0.154481	1.65495	44	0.125	818	0.079462	0.081787	2.02743	1	-3	DG8S182
0.918548	1.02608	47	0.765957	641	0.76131	0.761628	0.0104576	1	0	DG8S188
0.918548	0.974583	47	0.234043	641	0.23869	0.238372	0.0104576	1	-1	DG8S188
0.500557	1.17799	37	0.594595	568	0.554577	0.557025	0.453756	1	0	DG8S192
0.330595	1.3395	37	0.216216	568	0.170775	0.173554	0.946585	1	2	DG8S192
0.068589	2.08E-12	37	5.25E-14	568	0.024648	0.023141	3.57689	1	16	DG8S192
0.59723	0.798803	37	0.081081	568	0.099472	0.098347	0.279193	1	-2	DG8S192
0.678379	0.808381	37	0.054054	568	0.066021	0.065289	0.171956	1	4	DG8S192
0.426469	5.26E-12	37	2.33E-14	568	0.004401	0.004132	0.63242	1	8	DG8S192
0.523483	0.724957	37	0.054054	568	0.073063	0.071901	0.407025	1	12	DG8S192
0.61522	2.80E-12	37	4.94E-15	568	0.001781	0.001853	0.252644	1	-4	DG8S192
0.476998	3.49E-10	37	1.23E-12	568	0.003521	0.003306	0.50572	1	10	DG8S192
0.61522	2.80E-12	37	4.94E-15	568	0.001781	0.001653	0.252644	1	14	DG8S192
0.546339	0.890507	62	0.604839	730	0.632192	0.630051	0.363916	1	0	DG8S197
0.546339	1.12296	62	0.395161	730	0.367808	0.369949	0.363916	1	1	DG8S197
0.238022	1.253	60	0.558333	677	0.502216	0.506784	1.39227	1	0	DG8S201
0.978142	0.994481	60	0.333333	677	0.334564	0.334464	0.0007507	1	4	DG8S201
0.182591	0.668738	60	0.091667	677	0.131462	0.128223	1.89769	1	-2	DG8S201
0.317853	0.516752	60	0.016667	677	0.031758	0.030529	0.99776	1	2	DG8S201
0.73154	1.17216	62	0.959677	735	0.953061	0.953576	0.117702	1	0	DG8S212
0.73154	0.853125	62	0.040323	735	0.046939	0.046424	0.117702	1	2	DG8S212
0.58951	0.870115	35	0.614286	392	0.646684	0.644028	0.291109	1	4	DG8S215
0.560161	1.1622	35	0.385714	392	0.350765	0.35363	0.339425	1	0	DG8S215
0.558385	1.05E-12	35	2.88E-15	392	0.002551	0.002342	0.342508	1	2	DG8S215
0.087153	1.4521	51	0.45098	292	0.381301	0.374636	2.92619	1	0	DG8S221
0.31001	1.26739	51	0.323529	292	0.273973	0.281341	1.03063	1	5	DG8S221
0.027024	0.474098	51	0.088235	292	0.169521	0.157434	4.88927	1	-2	DG8S221
0.278737	0.540566	51	0.029412	292	0.053082	0.049563	1.17324	1	7	DG8S221
0.295148	0.888172	51	0.088235	292	0.123288	0.118076	1.09599	1	4	DG8S221
0.740381	0.712872	51	0.009804	292	0.013699	0.01312	0.109792	1	1	DG8S221
0.570284	1.42E-14	51	2.44E-17	292	0.001712	0.001458	0.322208	1	8	DG8S221
0.423644	2.88119	51	0.009804	292	0.003425	0.004373	0.640186	1	-1	DG8S221
0.288824	1.2375	58	0.37931	726	0.330579	0.334184	1.1251	1	0	DG8S232
0.816518	0.654799	58	0.37059	726	0.381543	0.38074	0.0538355	1	2	DG8S232
0.310151	0.742327	58	0.112069	726	0.145317	0.142857	1.03003	1	-8	DG8S232
0.887702	0.942197	58	0.077586	726	0.081956	0.081633	0.0277481	1	-4	DG8S232
0.207478	0.445616	58	0.017242	726	0.037879	0.036352	1.58884	1	4	DG8S232
0.126512	2.29088	58	0.043103	726	0.019284	0.021046	2.33479	1	-2	DG8S232
0.694959	1.33E-12	58	9.19E-16	726	0.000689	0.000638	0.153769	1	-8	DG8S232
0.432654	3.68E-15	58	1.02E-17	726	0.002755	0.002551	0.616689	1	6	DG8S232
0.089413	1.94577	62	0.951813	672	0.90997	0.913488	2.88491	1	0	DG8S238
0.089413	0.513937	62	0.048387	672	0.09003	0.086512	2.88491	1	-8	DG8S238
0.274709	0.76358	37	0.581081	476	0.644958	0.640351	1.19308	1	4	DG8S242
0.274709	1.30992	37	0.418919	476	0.355042	0.359649	1.19308	1	0	DG8S242
0.045473	2.18298	59	0.949153	468	0.895299	0.901328	4.00101	1	0	DG8S245
0.657445	0.826128	59	0.050848	468	0.060897	0.059772	0.196643	1	-4	DG8S245
0.002114	4.43E-13	59	1.93E-14	468	0.041667	0.037002	9.44796	1	4	DG8S245
0.48951	2.61E-14	59	5.80E-17	468	0.002137	0.001898	0.475408	1	-8	DG8S245
0.53694	0.881381	52	0.538461	682	0.569648	0.567439	0.381241	1	0	DG8S249
0.446947	1.21329	52	0.211539	682	0.181085	0.183243	0.578382	1	-19	DG8S249
0.545259	0.568061	52	0.009615	682	0.018862	0.016349	0.36558	1	-17	DG8S249
0.618479	0.6209	52	0.009615	682	0.015396	0.014988	0.248011	1	-21	DG8S249
0.693429	0.869599	52	0.086538	682	0.098241	0.097411	0.155398	1	-2	DG8S249

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0.348212	2.20918	52	0.019231	682	0.008798	0.009537	0.879961	1	6	DG8S249
0.144024	1.84322	52	0.076923	682	0.043255	0.04564	2.13443	1	2	DG8S249
0.064888	3.14E-12	52	5.38E-14	682	0.016862	0.015668	3.40783	1	-6	DG8S249
0.11288	1.22E-11	52	1.54E-13	682	0.012463	0.01158	2.51343	1	4	DG8S249
0.413523	1.51515	62	0.048077	682	0.032258	0.033379	0.686649	1	-4	DG8S249
0.309862	3.95E-12	52	2.04E-14	682	0.005132	0.004768	1.03128	1	-1	DG8S249
0.19623	1.62032	61	0.081967	584	0.052228	0.055039	1.67021	1	-10	DG8S250
0.574063	0.880554	61	0.221311	584	0.244007	0.24186	0.315932	1	-4	DG8S250
0.298023	1.32061	61	0.163934	584	0.129281	0.132558	1.09203	1	2	DG8S250
0.412746	1.2111	61	0.221311	584	0.190068	0.193023	0.870878	1	4	DG8S250
0.689122	1.16071	61	0.073771	584	0.064212	0.065116	0.160038	1	-2	DG8S250
0.045952	0.620924	61	0.172131	584	0.250856	0.243411	3.98337	1	0	DG8S250
0.138411	2.45E-13	61	2.33E-15	584	0.009418	0.008527	2.19554	1	8	DG8S250
0.178086	2.65184	61	0.02459	584	0.006418	0.010853	1.81352	1	-8	DG8S250
0.796756	0.829713	61	0.016394	584	0.019892	0.01938	0.0863309	1	6	DG8S250
0.64033	0.635261	61	0.008197	584	0.012843	0.012403	0.218311	1	-12	DG8S250
0.874558	1.12843	61	0.016393	584	0.014555	0.014729	0.0248236	1	-6	DG8S250
0.372264	3.74E-12	61	1.28E-14	584	0.003425	0.003101	0.796093	1	12	DG8S250
0.725989	1.07153	61	0.647541	680	0.631618	0.632928	0.122826	1	0	DG8S257
0.270525	0.548218	61	0.02459	680	0.044118	0.04251	1.21408	1	-6	DG8S257
0.819751	0.954377	61	0.303279	680	0.313235	0.312416	0.0518225	1	-2	DG8S257
0.558955	1.6024	61	0.016394	680	0.010294	0.010796	0.341499	1	2	DG8S257
0.121356	1.12314	61	0.008197	680	0.000735	0.00135	2.39973	1	-9	DG8S257
0.639807	1.12067	55	0.218182	637	0.199372	0.200867	0.218995	1	15	DG8S258
0.319529	1.22222	55	0.6	637	0.55102	0.554913	0.990872	1	18	DG8S258
0.102499	1.10E-11	55	1.40E-13	637	0.012559	0.011561	2.66622	1	0	DG8S258
0.078313	0.624114	55	0.145455	637	0.214286	0.208815	3.14173	1	12	DG8S258
0.564768	3.16E-15	55	4.88E-18	637	0.00157	0.001445	0.331515	1	24	DG8S258
0.601723	1.40074	55	0.027273	637	0.019623	0.020231	0.272405	1	21	DG8S258
0.564768	3.16E-15	55	4.88E-18	637	0.00157	0.001445	0.331515	1	33	DG8S258
0.024305	143973	55	0.00909	637	6.37E-08	0.000723	5.07274	1	11	DG8S258
0.421668	0.8133	37	0.662162	549	0.706739	0.703925	0.645661	1	2	DG8S261
0.421668	1.22958	37	0.337838	549	0.29326	0.296075	0.645661	1	0	DG8S261
0.685218	0.75139	37	0.027027	561	0.035651	0.035117	0.164313	1	-4	DG8S262
0.790829	0.93827	37	0.513513	561	0.529412	0.528428	0.0703492	1	0	DG8S262
0.832714	1.09169	37	0.094595	561	0.087344	0.087793	0.0446145	1	-10	DG8S262
0.646493	1.13866	37	0.243243	561	0.220143	0.221572	0.21035	1	2	DG8S262
0.65731	0.732383	37	0.027027	561	0.036542	0.035953	0.196808	1	-2	DG8S262
0.835834	1.10586	37	0.067588	561	0.061497	0.061873	0.0429424	1	4	DG8S262
0.509432	1.70371	37	0.027027	561	0.016043	0.016722	0.435233	1	8	DG8S262
0.234749	2.33E-11	37	2.30E-13	561	0.009804	0.009197	1.41185	1	-14	DG8S262
0.474342	5.07E-11	37	1.81E-13	561	0.003565	0.003344	0.511843	1	8	DG8S262
0.320699	1.25582	60	0.233333	751	0.195073	0.197904	0.986093	1	15	DG8S265
0.855426	0.965833	60	0.55	751	0.555859	0.557953	0.0331966	1	18	DG8S265
0.08648	6.77E-12	60	8.67E-14	751	0.01265	0.011714	2.9387	1	0	DG8S265
0.48687	0.845934	60	0.183333	751	0.20972	0.207768	0.483436	1	12	DG8S265
0.600177	1.40076	60	0.025	751	0.017976	0.018498	0.274729	1	21	DG8S265
0.579128	3.48E-12	60	4.64E-15	751	0.001332	0.001233	0.307647	1	33	DG8S265
0.612115	1.79472	60	0.008333	751	0.00466	0.004932	0.257106	1	-6	DG8S265
0.758941	0.938379	51	0.441177	615	0.456911	0.455706	0.0941703	1	-2	DG8S266
0.375468	1.20102	51	0.480392	615	0.434959	0.438438	0.785488	1	0	DG8S266
0.330063	0.701968	51	0.078431	615	0.10813	0.105856	0.948651	1	-4	DG8S266
0.862197	0.968728	60	0.383333	741	0.391383	0.390782	0.0301294	1	-4	DG8S269
0.509778	0.881533	60	0.55	741	0.580972	0.578652	0.434528	1	0	DG8S269
0.035718	2.51045	60	0.066667	741	0.027665	0.030587	4.41061	1	-5	DG8S269
0.173805	0.672634	33	0.227273	587	0.304233	0.3	1.84982	1	-2	DG8S271
0.217974	1.38912	33	0.681818	567	0.606702	0.610833	1.51768	1	0	DG8S271
0.430147	0.674487	33	0.060606	567	0.087302	0.085833	0.622428	1	2	DG8S271
0.011843	17.6876	33	0.030303	587	0.001764	0.003333	6.3342	1	4	DG8S271
0.912134	0.89298	58	0.008621	674	0.009644	0.009593	0.0121764	1	-6	DG8S277
0.94707	1.01449	58	0.275862	674	0.272997	0.273224	0.0044071	1	10	DG8S277
0.056017	1.47874	58	0.37089	674	0.284866	0.291667	3.65156	1	0	DG8S277
0.730644	1.12844	58	0.086207	674	0.077151	0.077869	0.118521	1	-2	DG8S277
0.075152	0.647866	58	0.172414	674	0.243323	0.237705	3.16675	1	2	DG8S277
0.289543	0.597743	58	0.034483	674	0.05638	0.054645	1.12175	1	8	DG8S277
0.940706	1.05742	58	0.017241	674	0.016321	0.016393	0.0055327	1	4	DG8S277
0.22211	1.36E-13	58	9.13E-16	674	0.006677	0.006148	1.49069	1	-4	DG8S277
0.254078	2.21016	58	0.025862	674	0.011869	0.012978	1.30074	1	6	DG8S277
0.45351	0.500945	58	0.008621	674	0.017062	0.016393	0.561863	1	12	DG8S277
0.363148	4.45E-11	58	1.66E-13	674	0.003709	0.003415	0.826977	1	14	DG8S277
0.504084	1.15686	48	0.625	576	0.590278	0.592949	0.446328	1	0	DG8S285
0.395359	0.820477	48	0.28125	576	0.322917	0.319712	0.722397	1	2	DG8S285
0.664895	1.18625	48	0.083333	576	0.071181	0.072115	0.187632	1	1	DG8S285
0.6726	0.683154	48	0.010417	576	0.015625	0.015224	0.178578	1	-1	DG8S285
0.356563	0.835868	61	0.565574	500	0.609	0.604278	0.849861	1	0	DG8S291
0.104377	0.36212	61	0.016393	500	0.044	0.040998	2.63735	1	-2	DG8S291
0.91169	0.975087	61	0.229508	500	0.234	0.233512	0.0123005	1	4	DG8S291
0.016273	1.91592	61	0.180328	500	0.103	0.111408	5.77312	1	2	DG8S291
0.844816	0.818186	61	0.008197	500	0.01	0.009804	0.038313	1	6	DG8S291
0.83931	0.953758	47	0.702128	729	0.711934	0.71134	0.0411182	1	2	DG8S292
0.83931	1.04849	47	0.297872	729	0.288068	0.28868	0.0411182	1	0	DG8S292
0.403875	0.81928	54	0.212963	727	0.248281	0.245839	0.698758	1	12	DG8S297

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0.167267	1.32613	54	0.416687	727	0.350069	0.354673	1.90727	1	0	DG8S297
0.584603	0.836842	54	0.111111	727	0.129988	0.128681	0.331796	1	4	DG8S297
0.43227	1.25473	54	0.148148	727	0.121733	0.12356	0.816716	1	18	DG8S297
0.06839	1.50E-11	54	2.41E-13	727	0.015818	0.014725	3.32125	1	8	DG8S297
0.049136	4.5873	54	0.027778	727	0.00619	0.007682	3.87089	1	-4	DG8S297
0.561417	1.4551	54	0.027778	727	0.019257	0.019846	0.337257	1	18	DG8S297
0.389089	0.459234	54	0.009259	727	0.019945	0.019208	0.741788	1	6	DG8S297
0.530464	0.650253	54	0.018519	727	0.028188	0.027529	0.393502	1	10	DG8S297
0.203843	0.504031	54	0.027778	727	0.053645	0.051857	1.61463	1	14	DG8S297
0.704978	2.41E-11	54	1.66E-14	727	0.000688	0.00064	0.143345	1	2	DG8S297
0.255396	2.69E-11	54	1.68E-13	727	0.00619	0.005762	1.29354	1	-2	DG8S297
0.501664	0.852277	60	0.791667	726	0.816804	0.814885	0.451414	1	0	DG8S298
0.48337	1.18478	60	0.2	726	0.174242	0.178209	0.49125	1	2	DG8S298
0.94407	0.930166	60	0.008333	726	0.008953	0.008906	0.0049217	1	1	DG8S298
0.446864	1.21504	60	0.841667	802	0.813853	0.816465	0.578595	1	0	DG8S301
0.446864	0.82302	60	0.158333	802	0.186047	0.183535	0.578595	1	1	DG8S301
0.756783	0.938942	59	0.330508	668	0.344595	0.343448	0.0959195	1	26	DG8S302
0.676336	0.881765	59	0.110169	668	0.123123	0.122069	0.17428	1	24	DG8S302
0.798986	1.05355	59	0.330509	668	0.319069	0.32	0.0848514	1	28	DG8S302
0.354682	1.42403	59	0.076271	668	0.054805	0.056552	0.856634	1	30	DG8S302
0.866434	0.956303	59	0.152542	668	0.158408	0.157931	0.0282879	1	0	DG8S302
0.716308	1.09245	50	0.77	756	0.753968	0.754963	0.132057	1	2	DG8S303
0.511442	2.1717	50	0.01	756	0.00463	0.004963	0.431115	1	4	DG8S303
0.834817	0.889546	50	0.22	756	0.240741	0.239454	0.225585	1	-2	DG8S303
0.720383	2.14E-12	50	1.42E-15	756	0.000661	0.00062	0.128129	1	0	DG8S303
0.403115	1.35581	27	0.203704	315	0.15873	0.162281	0.699016	1	0	DG8S307
0.527856	0.825112	27	0.666667	315	0.707936	0.704678	0.398517	1	4	DG8S307
0.849847	0.788966	27	0.074074	315	0.092054	0.090643	0.206094	1	-4	DG8S307
0.631224	1.36652	27	0.055558	315	0.04127	0.042398	0.230404	1	8	DG8S307
0.230715	0.785129	55	0.572727	689	0.630624	0.628344	1.43645	1	0	DG8S308
0.859933	1.0476	55	0.172727	689	0.166183	0.166667	0.0311381	1	2	DG8S308
0.342117	1.35534	55	0.118182	689	0.089986	0.09207	0.902463	1	-14	DG8S308
0.158639	1.88961	55	0.090909	689	0.055678	0.058468	1.98525	1	-4	DG8S308
0.20954	0.341987	55	0.009091	689	0.026125	0.024886	1.5748	1	-8	DG8S308
0.09531	1.16E-15	55	1.53E-17	689	0.013062	0.012097	2.78232	1	-2	DG8S308
0.229603	2.04227	55	0.036384	689	0.018142	0.019469	1.44332	1	4	DG8S308
0.233649	2.20E-12	61	1.34E-14	660	0.006061	0.005548	1.41851	1	8	DG8S316
0.80597	0.97619	61	0.311475	660	0.316687	0.316227	0.0139532	1	10	DG8S316
0.917848	0.980467	61	0.42623	660	0.431061	0.430652	0.0106387	1	0	DG8S316
0.492863	0.803044	61	0.090164	660	0.109848	0.108183	0.47027	1	12	DG8S316
0.378811	1.28211	61	0.139344	660	0.112121	0.114424	0.774558	1	14	DG8S316
0.334599	1.75593	61	0.032787	660	0.018939	0.020111	0.931016	1	16	DG8S316
0.265328	3.41E-11	61	1.82E-13	660	0.005303	0.004854	1.24074	1	2	DG8S316
0.427873	0.807637	31	0.354839	808	0.405118	0.402669	0.628589	1	2	DG8S322
0.637181	1.34977	31	0.048367	806	0.036304	0.036892	0.222449	1	10	DG8S322
0.188944	1.4144	31	0.451613	808	0.367987	0.372057	1.72584	1	0	DG8S322
0.145344	0.498649	31	0.084516	808	0.121287	0.118524	2.12045	1	4	DG8S322
0.738106	1.17794	31	0.080645	808	0.069307	0.069659	0.111799	1	6	DG8S322
0.856146	1.0385	62	0.733871	700	0.726429	0.727034	0.0319461	1	0	DG8S323
0.858146	0.96293	62	0.266129	700	0.273571	0.272986	0.0319461	1	5	DG8S323
0.737494	0.93203	60	0.283333	695	0.297842	0.296689	0.112342	1	0	DG8S324
0.891325	1.08814	60	0.025	695	0.023022	0.023179	0.018667	1	10	DG8S324
0.451315	0.838462	60	0.181667	695	0.220863	0.218543	0.567348	1	8	DG8S324
0.784209	1.08289	60	0.125	695	0.116547	0.117219	0.0749874	1	6	DG8S324
0.949648	1.01838	60	0.125	695	0.123022	0.123179	0.0039878	1	4	DG8S324
0.810258	1.12657	60	0.216687	695	0.197122	0.198675	0.259799	1	2	DG8S324
0.433781	1.56322	60	0.033333	695	0.021583	0.022517	0.612678	1	12	DG8S324
0.424208	0.782798	56	0.107143	726	0.13292	0.131074	0.638627	1	-4	DG8S332
0.776646	1.10954	56	0.080357	726	0.073003	0.073529	0.0804817	1	4	DG8S332
0.374309	0.812204	56	0.214286	726	0.251377	0.248721	0.789309	1	2	DG8S332
0.605396	0.865167	56	0.214286	726	0.235537	0.234016	0.266934	1	-2	DG8S332
0.285306	1.28095	56	0.303571	726	0.256887	0.26023	1.14164	1	0	DG8S332
0.231896	2.03133	56	0.035714	726	0.017906	0.019182	1.4282	1	-6	DG8S332
0.504794	1.3969	56	0.044643	726	0.032369	0.033248	0.444843	1	8	DG8S332
0.542218	0.868101	51	0.264706	539	0.293135	0.290578	0.371444	1	-5	DG8S333
0.542218	1.16194	51	0.735294	539	0.706865	0.709322	0.371444	1	0	DG8S333
0.178207	0.769592	61	0.352459	764	0.414287	0.409697	1.81251	1	1	SG08S100
0.178207	1.29939	61	0.647541	764	0.585733	0.590303	1.81251	1	2	SG08S100
0.084572	0.706471	58	0.396551	387	0.481912	0.470787	2.97477	1	1	SG08S102
0.084572	1.41548	58	0.603448	387	0.518088	0.529213	2.97477	1	2	SG08S102
0.637875	0.908047	61	0.647541	390	0.669231	0.666297	0.221532	1	0	SG08S112
0.637875	1.10127	61	0.352459	390	0.330769	0.333703	0.221532	1	2	SG08S112
0.527988	1.12903	60	0.583333	700	0.553571	0.555921	0.398263	1	0	SG08S120
0.527988	0.885714	60	0.416667	700	0.446429	0.444079	0.398263	1	2	SG08S120
0.405963	0.838721	60	0.708333	746	0.743298	0.740695	0.690592	1	0	SG08S138
0.405963	1.19229	60	0.291667	746	0.256702	0.259305	0.690592	1	2	SG08S138
0.866941	0.968661	61	0.557377	713	0.565217	0.564599	0.0280712	1	0	SG08S15
0.866941	1.03235	61	0.442623	713	0.434783	0.435401	0.0280712	1	2	SG08S15
0.168402	1.28721	61	0.516394	701	0.451498	0.456693	1.89711	1	0	SG08S26
0.168402	0.770884	61	0.483607	701	0.548502	0.543307	1.89711	1	2	SG08S26
0.145968	1.3272	61	0.516393	397	0.445844	0.45524	2.11388	1	2	SG08S27
0.145968	0.753463	61	0.483607	397	0.554156	0.54476	2.11388	1	1	SG08S27

FIG. 11E7

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0.223599	0.782321	58	0.560345	397	0.619647	0.612088	1.48112	1	1	SG08S32
0.223599	1.27825	58	0.439655	397	0.380353	0.387912	1.48112	1	0	SG08S32
0.308774	1.22057	61	0.639344	618	0.592233	0.596465	1.03591	1	1	SG08S35
0.308774	0.819292	61	0.360656	618	0.407787	0.403535	1.03591	1	2	SG08S35
0.518451	0.883658	61	0.467213	523	0.498088	0.494863	0.416973	1	1	SG08S39
0.518451	1.13168	61	0.532787	523	0.501912	0.505137	0.416973	1	0	SG08S39
0.533866	1.12929	59	0.415254	689	0.388087	0.388369	0.387027	1	0	SG08S42
0.533866	0.885511	59	0.584748	689	0.613933	0.611631	0.387027	1	2	SG08S42
0.654111	1.14576	61	0.114754	610	0.101639	0.102832	0.200756	1	1	SG08S46
0.654111	0.872787	61	0.885246	610	0.898381	0.897168	0.200756	1	3	SG08S46
0.189	0.776048	59	0.542373	743	0.604307	0.599751	1.72539	1	0	SG08S5
0.189	1.28858	59	0.457027	743	0.395693	0.400249	1.72539	1	2	SG08S5
0.565554	1.11705	59	0.466102	685	0.438686	0.44086	0.330178	1	2	SG08S50
0.565554	0.895211	59	0.533898	685	0.561314	0.55914	0.330178	1	0	SG08S50
0.069287	0.693897	57	0.456141	381	0.547244	0.535388	3.29983	1	0	SG08S508
0.069287	1.44114	57	0.54386	381	0.452756	0.464612	3.29983	1	2	SG08S508
0.16987	0.75	60	0.3	396	0.363638	0.355263	1.88409	1	2	SG08S507
0.16987	1.33333	60	0.7	396	0.636364	0.644737	1.88409	1	3	SG08S507
0.276852	0.802329	58	0.387931	392	0.441326	0.434444	1.18248	1	1	SG08S508
0.276852	1.24637	58	0.812069	392	0.558674	0.565556	1.18248	1	3	SG08S508
0.463684	1.20429	58	0.818985	371	0.789757	0.793708	0.536987	1	1	SG08S510
0.463684	0.830365	58	0.181035	371	0.210243	0.206294	0.536987	1	0	SG08S510
0.897524	1.02652	58	0.413793	362	0.407459	0.408333	0.0165867	1	1	SG08S511
0.897524	0.974165	58	0.586207	362	0.592541	0.591667	0.0165867	1	3	SG08S511
0.538636	1.1332	57	0.429825	388	0.399484	0.403371	0.378074	1	2	SG08S512
0.538636	0.882455	57	0.570175	388	0.600516	0.596629	0.378074	1	1	SG08S512
0.276978	0.807854	61	0.418032	392	0.470663	0.463576	1.18188	1	1	SG08S517
0.276978	1.23785	61	0.581967	392	0.529337	0.536424	1.18188	1	3	SG08S517
0.246826	1.25791	61	0.814754	397	0.559194	0.566594	1.34118	1	1	SG08S520
0.246826	0.794971	61	0.385246	397	0.440806	0.433406	1.34118	1	0	SG08S520
0.998424	0.999561	59	0.728813	391	0.7289	0.728889	3.90E-06	1	2	SG08S6
0.998424	1.00044	59	0.271187	391	0.2711	0.271111	3.90E-06	1	0	SG08S6
0.200406	0.775536	59	0.440878	380	0.503947	0.495444	1.63941	1	1	SG08S70
0.200406	1.26943	59	0.569322	380	0.496053	0.504556	1.63941	1	3	SG08S70
0.073231	1.40539	61	0.590164	740	0.506081	0.512484	3.20907	1	0	SG08S71
0.073231	0.711544	61	0.409836	740	0.493919	0.487516	3.20907	1	2	SG08S71
0.252356	0.7983	60	0.458333	378	0.51455	0.506849	1.31021	1	3	SG08S73
0.252356	1.25268	60	0.541667	378	0.48545	0.493151	1.31021	1	1	SG08S73
0.830216	0.958777	60	0.466667	394	0.477157	0.475771	0.0459779	1	1	SG08S76
0.830216	1.043	60	0.533333	394	0.522843	0.524229	0.0459779	1	2	SG08S76
0.781553	1.0559	60	0.525	394	0.511421	0.513216	0.0788933	1	0	SG08S90
0.781553	0.947063	60	0.475	394	0.488579	0.486784	0.0788933	1	1	SG08S90
0.234935	0.760584	62	0.774194	705	0.81844	0.814863	1.41073	1	1	SG08S93
0.234935	1.31478	62	0.225806	705	0.18156	0.185137	1.41073	1	2	SG08S93
0.402568	0.83199	56	0.294643	362	0.334254	0.328947	0.700643	1	0	SG08S94
0.402568	1.20194	56	0.705357	362	0.665746	0.671053	0.700643	1	2	SG08S94
0.124832	1.34391	60	0.483333	586	0.41041	0.417183	2.35582	1	2	SG08S95
0.124832	0.744099	60	0.516667	586	0.58959	0.582817	2.35582	1	3	SG08S95
0.965393	1.00838	61	0.581967	613	0.579935	0.580119	0.0018825	1	2	SG08S96
0.965393	0.991686	61	0.418033	613	0.420065	0.419881	0.0018825	1	3	SG08S96
0.500983	0.81986	61	0.877049	713	0.896914	0.895349	0.452853	1	0	SG08S97
0.500983	1.21972	61	0.122951	713	0.103086	0.104651	0.452853	1	1	SG08S97

FIG. 11E8

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FIG. 12A

Table 2a. Allelic frequencies for markers strongly correlated to the orientation.

Marker	Allele	Frequency on inverted form	Frequency on common form
AF131215-2	0	0.067	0.839
AF131215-2	4	0.896	0.121
AF131215-2	8	0.037	0.040
D8S1695	0	0.083	0.749
D8S1695	2	0.000	0.025
D8S1695	4	0.092	0.151
D8S1695	6	0.129	0.012
D8S1695	8	0.596	0.036
D8S1695	10	0.081	0.013
D8S1695	12	0.020	0.014
DG00AAHBG	1	0.253	0.837
DG00AAHBG	2	0.747	0.163
DG8S127	0	0.055	0.741
DG8S127	1	0.935	0.098
DG8S127	6	0.010	0.161
DG8S156	-6	0.051	0.000
DG8S156	0	0.181	0.806
DG8S156	6	0.744	0.194
DG8S156	9	0.025	0.000
DG8S161	0	0.074	0.688
DG8S161	2	0.926	0.312
DG8S163	0	0.947	0.154
DG8S163	3	0.053	0.846
DG8S170	-4	0.038	0.000
DG8S170	0	0.651	0.135
DG8S170	2	0.310	0.865
DG8S179	0	0.082	0.795
DG8S179	7	0.918	0.205
DG8S197	0	0.149	0.902
DG8S197	1	0.851	0.098
DG8S242	0	0.751	0.121
DG8S242	4	0.249	0.879
DG8S257	-9	0.000	0.006
DG8S257	-6	0.116	0.031
DG8S257	-2	0.628	0.054
DG8S257	0	0.256	0.884
DG8S257	2	0.000	0.025
DG8S261	0	0.726	0.075
DG8S261	2	0.274	0.925
DG8S269	-5	0.030	0.003
DG8S269	-4	0.891	0.102

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**FIG. 12B****Table 2a. Allelic frequencies for markers strongly correlated to the orientation.**

Marker	Allele	Frequency on inverted form	Frequency on common form
DG8S269	0	0.079	0.894
SG08S102	1	0.076	0.765
SG08S102	2	0.924	0.235
SG08S120	0	0.159	0.858
SG08S120	2	0.841	0.142
SG08S138	0	0.391	0.939
SG08S138	2	0.609	0.061
SG08S15	0	0.158	0.805
SG08S15	2	0.842	0.195
SG08S26	0	0.841	0.167
SG08S26	2	0.159	0.833
SG08S27	1	0.136	0.831
SG08S27	2	0.864	0.169
SG08S32	0	0.771	0.108
SG08S32	1	0.229	0.892
SG08S5	0	0.087	0.902
SG08S5	2	0.913	0.098
SG08S508	1	0.081	0.680
SG08S508	3	0.919	0.320
SG08S517	1	0.075	0.767
SG08S517	3	0.925	0.233
SG08S520	0	0.080	0.683
SG08S520	1	0.920	0.317
SG08S70	1	0.074	0.766
SG08S70	3	0.926	0.234
SG08S71	0	0.928	0.226
SG08S71	2	0.072	0.774
SG08S73	1	0.924	0.236
SG08S73	3	0.076	0.764
SG08S76	1	0.030	0.716
SG08S76	2	0.970	0.284
SG08S95	2	0.905	0.093
SG08S95	3	0.095	0.907

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**Association of Drug Response to surrogate marker alleles - Combined SNRI and SSRIs**

Marker	Position	Allele	Relative risk	#aff	R freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.417	71	0.394	27	0.315	1.076	0.300
SG08S95	10.9769	G	1.340	99	0.475	36	0.403	1.109	0.292
SG08S5	11.02427	G	1.531	99	0.460	35	0.357	2.239	0.135
SG08S71	11.0543	A	2.050	99	0.646	35	0.471	6.515	0.011
SG08S73	11.08065	C	2.189	94	0.590	34	0.397	7.522	0.006

Marker	Position	Allele	Relative risk	#aff	VGR freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.395	32	0.391	27	0.315	0.737	0.391
SG08S95	10.9769	G	1.624	44	0.523	36	0.403	2.296	0.130
SG08S5	11.02427	G	1.884	44	0.511	35	0.357	3.785	0.052
SG08S71	11.0543	A	2.450	43	0.686	35	0.471	7.374	0.007
SG08S73	11.08065	C	2.596	42	0.631	34	0.397	8.311	0.004

Marker = name of marker

Position = position of marker in Build 33

Allele: A,C,G, or T for the SNPs; and the offset from CEPH for DG8S269

# aff = number of Responders or Very Good Responders

R freq/VGR freq = frequency of allele in Responders/Very Good Responders

# ctrl = number of Non Responders

NR freq = frequency of allele in Non-Responders

X2 = Chi squared value

**Association of Drug Response to surrogate marker alleles - Venlafaxine**

Marker	Position	Allele	Relative risk	#aff	R freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.510	24	0.292	14	0.214	0.557	0.4554
SG08S95	10.9769	G	1.291	32	0.422	18	0.361	0.356	0.5505
SG08S5	11.02427	G	1.779	32	0.406	18	0.278	1.684	0.1945
SG08S71	11.0543	A	2.184	32	0.609	18	0.417	3.451	0.0632
SG08S73	11.08065	C	2.425	32	0.578	18	0.361	4.384	0.0363

Marker	Position	Allele	Relative risk	#aff	VGR freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.222	10	0.250	14	0.214	0.084	0.7722
SG08S95	10.9769	G	1.769	15	0.500	18	0.361	1.294	0.2554
SG08S5	11.02427	G	2.600	15	0.500	18	0.278	3.448	0.0633
SG08S71	11.0543	A	2.100	15	0.600	18	0.417	2.213	0.1369
SG08S73	11.08065	C	3.056	15	0.633	18	0.361	4.913	0.0266

FIG. 13A

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**Association of Drug Response to surrogate marker alleles - Fluoxetine**

Marker	Position	Allele	Relative risk	#aff	R freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.105	34	0.441	12	0.417	0.043	0.8349
SG08S95	10.9769	G	1.637	49	0.510	18	0.389	1.565	0.2110
SG08S5	11.02427	G	1.264	49	0.469	17	0.412	0.340	0.5601
SG08S71	11.0543	A	1.882	49	0.653	18	0.500	2.559	0.1097
SG08S73	11.08065	C	1.463	46	0.565	17	0.471	0.893	0.3447

Marker	Position	Allele	Relative risk	#aff	VGR freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.200	13	0.462	12	0.417	0.102	0.7494
SG08S95	10.9769	G	2.200	18	0.583	18	0.389	2.742	0.0978
SG08S5	11.02427	G	1.429	18	0.500	17	0.412	0.549	0.4585
SG08S71	11.0543	A	2.778	17	0.735	18	0.500	4.146	0.0417
SG08S73	11.08065	C	1.875	16	0.625	17	0.471	1.593	0.2069

**Association of Drug Response to surrogate marker alleles - Citalopram or escitalopram**

Marker	Position	Allele	Relative risk	#aff	R freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	2.200	26	0.423	8	0.250	1.621	0.2029
SG08S95	10.9769	G	1.667	33	0.455	9	0.333	0.865	0.3524
SG08S5	11.02427	G	2.303	33	0.470	9	0.278	2.205	0.1375
SG08S71	11.0543	A	3.333	33	0.667	8	0.375	4.503	0.0338
SG08S73	11.08065	C	4.750	31	0.613	8	0.250	6.913	0.0086

Marker	Position	Allele	Relative risk	#aff	VGR freq	#ctrl	NR freq	X2	p-value
DG8S269	8.71376	-4	1.800	12	0.375	8	0.250	0.697	0.4039
SG08S95	10.9769	G	1.714	13	0.462	9	0.333	0.730	0.3928
SG08S5	11.02427	G	3.033	13	0.538	9	0.278	3.016	0.0824
SG08S71	11.0543	A	3.750	13	0.692	8	0.375	4.098	0.0429
SG08S73	11.08065	C	4.800	13	0.615	8	0.250	5.488	0.0191

FIG. 13B

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- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

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